Whole Earth Epilog

access to tools

U.S.A. $4
Canada $5
United Kingdom £1.75
Australia $4 (recommended)
New Zealand $4

First Edition
September 1974

Then the Lord answered Job out of the whirlwind, and said, Who is this that darkeneth counsel by words without knowledge? . . .

Where was thou when I laid the foundations of the earth? declare if thou hast understanding. Who hath laid the measures thereof, if thou knowest? or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? or who laid the corner-stone thereof: when the morning stars sang together, and all the sons of God shouted for joy? . . .

Hast thou entered into the springs of the sea? or hast thou walked in the search of the depth? Have the gates of death been opened unto thee? or hast thou seen the doors of the shadow of death? Hast thou perceived the breadth of the earth? declare if thou knowest it all. . . .

Canst thou bind the sweet influences of Pleiades, or loose the bands of Orion? Canst thou bring forth Mazzaroth in his season? or canst thou guide Arcturus with his sons? Knowest thou the ordinances of heaven? canst thou set the dominion thereof in the earth? Canst thou lift up thy voice to the clouds, that abundance of waters may cover thee? Canst thou send lightnings, that they may go, and say unto thee, Here we are? Who hath put wisdom in the inward parts? or who hath given understanding to the heart? . . .

Doth the hawk fly by thy wisdom, and stretch her wings toward the south? Doth the eagle mount up at thy command, and make her nest on high? She dwelleth and abideth on the rock, upon the crag of the rock, and the strong place. From thence she seeketh the prey, and her eyes behold afar off. . . .

JOB
38:2; 4-8; 16-19; 31-37
39:26-30

Whole Earth Epilog

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FUNCTION

The WHOLE EARTH EPILOG functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.

An item is listed in the EPILOG if it is deemed:

1) Useful as a tool,

2) Relevant to independent education,

3) High quality or low cost,

4) Easily available by mail.

EPILOG listings are continually revised according to the experience and suggestions of EPILOG users and staff.

PURPOSE

We are as gods, and may as well get good at it. This might include losing the pride that went before the fall we are in the process of taking. Rolling with such a fall is our present lesson–– learning whatever resilience, ingenuity, basic skills, and enthused detachment that survival requires. And learning perhaps to reverence some Gods who are not as us.

FRONT COVER

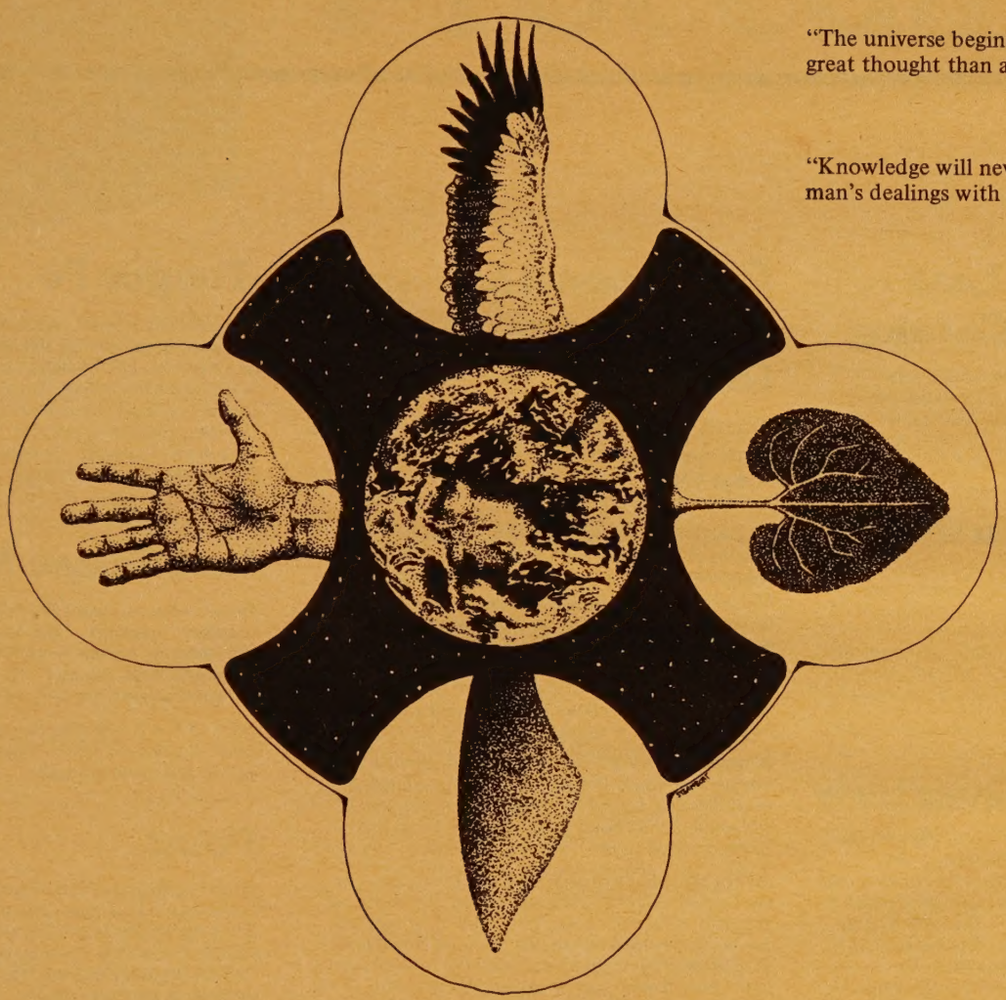
The "unearthly" blue (well?) in the lunar foreground is in the original NASA transparency–– I don't know why it's blue. The photo (from Apollo 12) is one of overlooked thousands that NASA has. If you want a different picture of the Earth or the space program than the routine 8 or 10 you see constantly, contact Les Gaver, NASA HQ, 4th & Independence, Washington, DC 20546, and have a look at the file. They are nice people, but there are only a few of them: curb unreasonable demands.

INSIDE FRONT COVER

Everyone says, "Oh, the moon!" Except it's the Earth–– photo by Apollo 12. That's not Nevada in the foreground. It's not a part of any nation. It's our harsh welcome mat to the rest of the universe–– the short-horizoned windless lunar desert where visibility is always perfect and silence always total. No air. The quotation is the release of Job's sufferings in The Bible, *King James version. Consult your next motel drawer for the full story.*

–SB

Understanding Whole Systems



"The universe begins to look more like a great thought than a great machine."

–Sir James Jeans
Astronomer

"Knowledge will never replace respect in man's dealings with ecological systems."

–Roy A. Rappaport
Anthropologist

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Steps to an Ecology of Mind

Where the insights of Buckminster Fuller initiated the **Whole Earth Catalog**, *Gregory Bateson's insights lurk behind most of what's going on in this* **Epilog**.

Through him I became convinced that much more of whole systems could be understood than I thought, and that much more existed wholesomely beyond understanding than I thought—— that mysticism, mood, ignorance, and paradox could be rigorous, for instance, and that the most potent tool for grasping these essences—— these influence nets—— is cybernetics.

Bateson is responsible for a number of formal discoveries, most notably the "Double Bind" theory of schizophrenia. As an anthropologist he did pioneer work in New Guinea and (with Margaret Mead) in Bali. He participated in the Macy Foundation meetings that founded the science of cybernetics but kept a healthy distance from computers. He has wandered thornily in and out of various disciplines—— biology, ethnology, linguistics, epistemology, psychotherapy—— and left each of them altered with his passage.

This book chronicles the journey. It is a collection of all his major papers, 1935-1971. In recommending the book I've learned to suggest that it be read backwards. Read the recent broad analyses of mind and ecology at the end of the book and then work back to see where the premises come from.

In my view Bateson's special contribution to cybernetics is in exploring its second, more difficult realm (where the first is feedback, a process influencing itself, what Bateson calls "circuit"; and the second is the meta-realm of hierarchic levels, the domain of context, of paradox and abundant pathology, and of learning.)

Strong medicine.

—SB

Steps to an Ecology of Mind
Gregory Bateson
1972; 517pp
$1.95 postpaid
from:
Ballantine Books, Inc.
201 E. 50th St.
New York, NY 10022
or Whole Earth

No organism can afford to be conscious of matters with which it could deal at unconscious levels.

•

Mere purposive rationality unaided by such phenomena as art, religion, dream, and the like, is necessarily pathogenic and destructive of life; its virulence springs specifically from the circumstance that life depends upon interlocking *circuits* of contingency, while consciousness can only see such short arcs as human purpose may direct.

•

The social scene is nowadays characterized by the existence of a large number of self-maximizing entities which, in law, have something like the status of 'persons'—— trusts, companies, political parties, unions, commerical and financial agencies, nations, and the like. In biological fact, these entities are precisely *not* persons and are not even aggregates of whole persons. They are aggregates of *parts* of persons.

•

They say that power corrupts; but this, I suspect, is nonsense. What is true is that the *idea of power* corrupts.

•

(My father, the geneticist William Bateson, used to read us passages of the Bible at breakfast—— lest we grow up to be *empty-headed* atheists.)

•

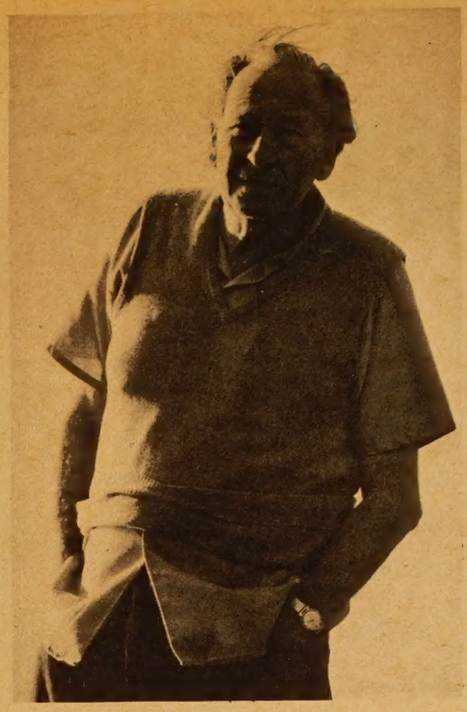
In no system which shows mental characteristics can any part have unilateral control over the whole. In other words, *the mental characteristics of the system are immanent, not in some part, but in the system as a whole.*

•

The Theology of Alcoholics Anonymous

Some outstanding points of the theology of AA are:

(1) *There is a Power greater than the self.* Cybernetics would go somewhat further and recognize that the "self" as ordinarily understood is only a small part of a much larger



Gregory Bateson

trial-and-error system which does the thinking, acting, and deciding. This system includes all the informational pathways which are relevant at any given moment to any given decision. The "self" is a false reification of an improperly delimited part of this much larger field of interlocking processes.

•

But what about "me"? Suppose I am a blind man, and I use a stick. I go tap, tap, tap. Where do *I* start? Is my mental system bounded at the handle of the stick? Is it bounded by my skin? Does it start halfway up the stick? Does it start at the tip of the stick? But these are nonsense questions. The stick is a pathway along which transforms of difference are being transmitted. The way to delineate the system is to draw the limiting line in such a way that you do not cut any of these pathways in ways which leave things inexplicable. If what you are trying to explain is a given piece of behavior, such as the locomotion of the blind man, then, for this purpose, you will need the street, the stick, the man; the street, the stick, and so on, round and round.

•

If you put God outside and set him vis-a-vis his creation and if you have the idea that you are created in his image, you will logically and naturally see yourself as outside and against the things around you. And as you arrogate all mind to yourself, you will see the world around you as mindless and therefore not entitled to moral or ethical consideration. The environment will seem to be yours to exploit. Your survival unit will be you and your folks or conspecifics against the environment of other social units, other races and the brutes and vegetables.

If this is your estimate of your relation to nature *and you have an advanced technology*, your likelihood of survival will be that of a snowball in hell. You will die either of the toxic by-products of your own hate, or simply, of overpopulation and overgrazing. The raw materials of the world are finite.

•

When you narrow down your epistemology and act on the premise "What interests me is me, or my organization, or my species," you chop off consideration of other loops of the loop structure. You decide that you want to get rid of the by-products of human life and that Lake Erie will be a good place to put them. You forget that the ecomental system called Lake Erie is a part of *your* wider ecomental system—— and that if Lake Erie is driven insane, its insanity is incorporated in the larger system of *your* thought and experience.

•

It is rather unusual to find that any feature of a biological system is at all directly determined by the need which it fulfills. Eating is governed by appetite, habit, and social convention rather than by hunger, and respiration is governed by CO_2 excess rather than by oxygen lack. And so on.

In contrast, the products of human planners and engineers are constructed to meet specified needs in a much more direct manner, and are correspondingly less viable. The multiple causes of eating are likely to ensure the performance of this necessary act under a large variety of circumstances and stresses whereas, if eating were controlled only by hypoglycaemia, any disturbance of the single pathway of control would result in death. Essential biological functions are not controlled by lethal variables, and planners will do well to note this fact.

•

D: What is a cliché, Daddy?
F: A cliché? It's a French word, and I think it was originally a printer's word. When they print a sentence they have to take the separate letters and put them one by one into a sort of grooved stick to spell out the sentence. But for words and sentences which people use often, the printer keeps little sticks of letters ready made up. And these ready-made sentences are called clichés.

•

F: Let's go back to the question which you asked and which I said was too difficult to answer today. We were talking about the printer breaking up his clichés, and you said that he would still keep some sort of order among his letters—— to keep from going mad. And then you asked "What sort of order should we cling to so that when we get into a muddle we do not go mad?" It seems to me that the "rules" of the game is only another name for that sort of order.

D: Yes—— and cheating is what gets us into muddles.

F: In a sense, yes, That's right. Except that the whole point of the game is that we do get into muddles, and do come out on the other side, and if there were no muddles our "game" would be like canasta or chess—— and that is not how we want it to be.

D: Is it *you* that make the rules, Daddy? Is that fair?

F: That, daughter, is a dirty crack. And probably an unfair one. But let me accept it at face value. Yes, it is I who make the rules—— after all, I do not want us to go mad.

D: All right. But, Daddy, do you also change the rules? Sometimes?

F: Hmm, another dirty crack. Yes, daughter, I change them constantly. Not all of them, but some of them.

D: I wish you'd tell me when you're going to change them!

F: Hmm—— yes—— again. I wish I could. But it isn't like that. If it were like chess or canasta, I could tell you the rules, and we could, if we wanted to, stop playing and discuss the rules. And then we could start a new game with the new rules. But what rules would hold us between the two games? While we were discussing the rules?

D: I don't understand.

F: Yes. The point is that the purpose of these conversations is to discover the "rules." It's like life—— a game whose purpose is to discover the rules, which rules are always changing and always undiscoverable.

D: But I don't call that a *game*, Daddy.

F: Perhaps not. I would call it a game, or at any rate "play." But it certainly is not like chess or canasta. It's more like what kittens and puppies do. Perhaps. I don't know.

***

D: Daddy, why do kittens and puppies play?

F: I don't know—— I don't know.

A Third Chameleon-hypothesis

"What color is a chameleon on a mirror?"

I asked the question of Gregory Bateson at a point in our interview when we were lost in contemplation of the function, if any, of consciousness—— self-consciousness. Both of us being biologists, we swerved to follow the elusive chameleon. Gregory asserted that the creature would settle at a middle value in its color range. I insisted that the poor beast trying to disappear in a universe of itself would endlessly cycle through a number of its disguises.

Now hear the hypothesis of Gerald Hall, student of Gregory's at Santa Cruz, author of the following book review, and proponent of G. Spencer Brown's **Laws of Form** *(which denotes but two basic systems—— ones which remember and ones which oscillate):*

"The chameleon will stay whatever color he was at the moment he entered the mirror domain."

—SB

System and Structure

This book is expensive, long, and difficult. It is also full, significant, and rewarding for those seeking a deep theoretical understanding in the fields of semiotics and communications. A revolution has been going on that doesn't get into the newspapers or magazines. Developments in cybernetics, information and communications theory, general systems theory, and mathematical logic have come together to require a restructuring at the foundations of our knowledge.

In System and Structure *Tony Wilden shows how things look from a new vantage point. It takes developments in modern science as conceptual tools and goes to work on psychology, anthropology, linguistics, political economy, ecology, the genetics of intelligence, structuralism, and literary works by Montaigne and Svevo. Some of the tools are the ideas of Logical Types, analog and digital coding, feedback circuits and morphogenic systems, as well as the related concepts of paradox, oscillation, runaway, double bind, redundancy, emergence, and others. The list is long, but each idea is important for understanding ourselves, our society, and our place in the ecosystem.*

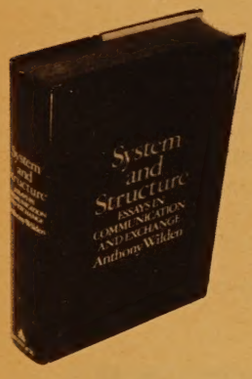
Two of the great men in the history of ideas receive particular attention: Freud and Marx. Their genius is revealed in how much of their work anticipates and is validated by these new ideas. It also becomes possible to separate their important insights from the errors derived from the prejudices of their times and their lack of essential concepts. Other authors whose ideas are examined include Bateson, Laing, Lacan, Piaget, Levi-Strauss, and Marcuse.

This is also a deeply political book, committed to the liberation of men and women from an irrational and destructive system. It is an expression of a new guerrilla rhetoric which requires that you know everything your oppressor knows and that you be prepared to confront him on any ground. The non-neutrality of the text when dealing with theories and ideas which function only as repressive metaphors of the status quo, may offend some readers, while stimulating and challenging others.

System and Structure *is one book that should not be read straight through. Probably the best approach to the material (after reading the introduction) would be to choose the chapter that interests you most, perhaps "Beyond the Entropy Principle in Freud," or "Nature and Culture: The Emergency of Symbolic and Imaginary Exchange," or "Analog and Digital Communication: On Negation, Signification, and Meaning." When a new and unfamiliar concept is encountered, the index should be consulted for other places where that idea is used and developed. This branching out will make the best possible use of the redundancy involved in using the same set of ideas in many different contexts. It will also allow your own needs and interests to chart the most rewarding course through the material.*

System and Structure *is a valuable book, containing a significant array of important ideas which no one with pretensions to intellect can afford to be without. Read it.*

—Gerald Hall



System and Structure
(Essays in Communication and Change)
Anthony Wilden
1972; 540pp.
$23.75 postpaid
from:
Barnes & Noble Books
Keystone Industrial Park
Scranton PA 18512
or Whole Earth

If dissent is to escape its own self-alienation, if it is to escape the automatic response of liberalism, that 'all ideas are equal' or that a new theory is simply 'an interesting new point of view', then dissent must transcend the status of negative identification. In a word, ALL DISSENT MUST BE OF A HIGHER LOGICAL TYPE THAN THAT TO WHICH IT IS OPPOSED. It will thus not make the Hegelian error of trying to reduce real and material differences to identity, for this is to be caught in an endless *jeu de miroirs* from which there is simply no escape.

•

2 Zero is not an absence, not nothing, not the sign of a thing, not a simple exclusion. If the natural numbers are signs, it is a signifier. It is not an integer, but a meta-integer, a rule about integers and their relationships.
3 The empty set is similarly a rule about sets.
4 The digital has to do with boundaries. In number theory, set theory, and language, 'zero', '0' and 'not' are the rules for punctuating boundaries. 'Not' is of a higher logical type than zero or Ø, if only because it is the logical prerequisite for zero or Ø.
5 Analog refusal, rejection, and disavowal are to be distinguished from syntactic negation.

Cream Rises
CYBERNETICS

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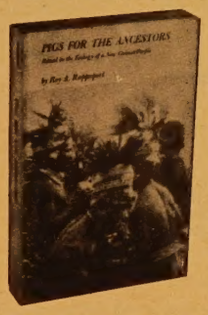
Pigs for the Ancestors

Fast becoming a classic of anthropological fieldwork, this study pioneers in the application of energetics (energy expenditure in gardening, for example) and of cybernetics (which shows how the Tsembaga's pig cycle, ritual cycle, and warfare cycle interact to accomplish ecological stability). We've carried two of Rappaport's papers in **The CoEvolution Quarterly** *—— both of them based on this book's wild careful experience in New Guinea. Ideas here, I believe, are going to change how we think about our own culture and what we do about it.*

—SB



Pigs for the Ancestors
(Ritual in the Ecology of a New Guinea People)
Roy A. Rappaport
1968; 311pp.
$2.95 postpaid
from:
Yale University Press
302 Temple St.
New Haven, CT 06511
or Whole Earth

Among the Tsembaga, and other Maring-speaking groups in New Guinea, through ritual the following are effected:

1. Relationships between people, pigs, and gardens are regulated. This regulation operates directly to protect people from the possible parasitism and competition of their pigs and indirectly to protect the environment by helping to maintain extensive areas in virgin forest and assuring adequate cultivation-fallow ratios in secondary forest.
2. The slaughter, distribution, and consumption of pig is regulated and enhances the value of pork in the diet.
3. The consumption of nondomesticated animals is regulated in a way that tends to enhance their value to the population as a whole.
4. The marsupial fauna may be conserved.
5. The redispersal of people over land and the redistribution of land among territorial groups is accomplished.
6. The frequency of warfare is regulated.

•

It can be argued that the cognized model is not only not likely to conform in all respects to the real world (the operational model) but that it must not.

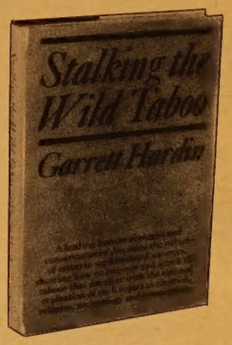
Stalking the Wild Taboo

Hardin has been stalking wild taboos for some time now. Abortion. Religion. Technology. Competition. The emphasis is on abortion and competition. Not your typical reading matter. Can make you angry at times. But that's what taboos are all about. Printed on easy-to-read tan paper with brown ink.

—Graham Holmboe
[Suggested by Stephanie Mills]

On the cybernetics of competition Hardin is unsurpassed.

—SB



Stalking the Wild Taboo
Garrett Hardin
1973;226pp.
$8.95 postpaid
from:
William Kaufmann, Inc.
1 First Street
Los Altos, CA 94022
or Whole Earth

Society does not need more children; but it does need more loved children. Quite literally, we cannot afford unloved children—— but we pay heavily for them every day. There should be not the slightest communal concern when a woman elects to destroy the life of her thousandth-of-an-ounce embryo. But all society should rise up in alarm when it hears that a baby that is not wanted is about to be born.

•

I refer to the principle by a name—— the "competitive exclusion principle," or more briefly, the "exclusion principle." It may be briefly stated thus: Complete competitors cannot coexist. . . . What does the exclusion principle mean? Roughly this: that (i) if two noninterbreeding populations "do the same thing"—— that is, occupy precisely the same ecological niche in Elton's sense—— and (ii) if they are "sympatric"—— that is, if they occupy the same geographic territory—— and (iii) if population A multiplies even the least bit faster than population B, then ultimately A will completely displace B, which will become extinct.

•

The general rule may be stated in either of two different ways: *Complete competitors cannot coexist*—— as was said earlier; or, *Ecological differentiation is the necessary condition for coexistence.*

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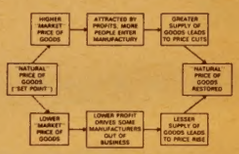


The cybernetic model can be carried over into economics, as shown in Figure 4, which depicts the control of price in the Ricardian economic scheme. The well-known course of events can be read from the figure. Again we see that negative feedback produces stability about a "set point," which Ricardo called the "natural price." The model would be more realistic if it were constructed in terms of *profit* rather than price, but for historical continuity we retain the classic Ricardian element *price*. As with the biological example previously used, the meaning of "natural" can, in general, only be determined *ex post facto*. The word "natural" is here (as elsewhere) a verbal cloak for ignorance. Nevertheless, it or an equivalent word is needed to remind us of the state of affairs. There is mystery here. It was this mystery together with the unpremeditated consequences of the economic cybernetic system that led Adam Smith to speak of an "Invisible Hand."

•

The Cybernetics of Monopoly

If a monopoly is produced, what then? Here is a question which Ricardo did not face. At first glance one might say that the monopoly price should be stable, because if it were to rise, new entrepreneurs would be attracted to the field and would lower the price. But this is a naive view. We know that it is more difficult to start a business than to continue one, and consequently a monopolist can maintain a price considerably above the "natural price." Furthermore, a realistic model must include much more than we have indicated so far. We must consider the whole complex of phenomena that we include under the word "power." *Social power is a process with positive feedback.* By innumerable stratagems a monopolist will try to manipulate the machinery of society in such a way as to ward off all threats to re-establish negative feedback and a "natural" cybernetic equilibrium. And, as history shows, the monopolist in one field will seek to extend his power into others, without limit.

Patterns in Nature

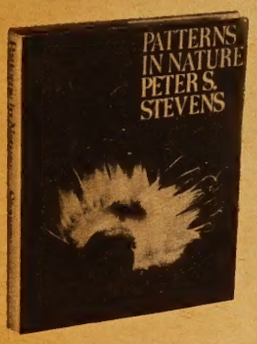
This is a book in which, with a few photographs, some clear uncomplicated text and an occasional number, you are plunged into nature's mysteries. I suspect that the route to the frontier need never be more complicated than this, but there are so few guides who can show you the way.

I wish the book were five times as long as it is because reading it is such a pleasure.

There are eight chapters:

1. *Space and Size*
2. *Basic Patterns*
3. *All Things Flow*
4. *Spirals, Meanders and Explosives*
5. *Models of Branching*
6. *Trees*
7. *Soap Bubbles*
8. *Packing and Cracking*

—Steve Baer



Patterns in Nature
Peter S. Stevens
1974; 240pp.
$10.00 postpaid
from:
Little, Brown and Co. Inc.
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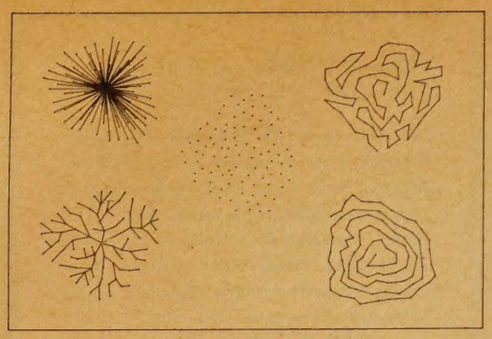
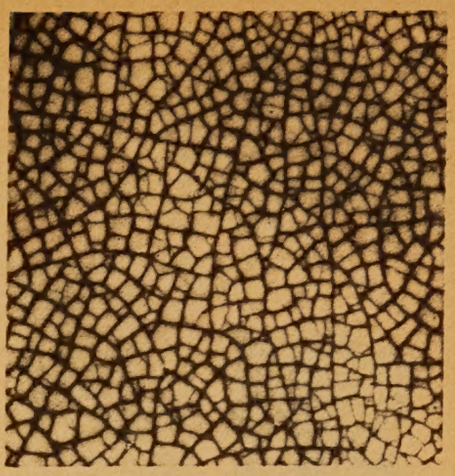
or Whole Earth



In matters of visual form we sense that nature plays favorites. Among her darlings are spirals, meanders, branching patterns, and 120-degree joints. Those patterns occur again and again. Nature acts like a theatrical producer who brings on the same players each night in different costumes for different roles. The players perform a limited repertoire: pentagons make most of the flowers but none of the crystals; hexagons handle most of the repetitive two-dimensional patterns but never by themselves enclose three-dimensional space. On the other hand, the spiral is the height of versatility, playing roles in the replication of the smallest virus and in the arrangement of matter in the largest galaxy.

•

Another benefit of small leaves is that they enable the tree to adopt different patterns of growth in different environments. The giant fronds of the palm grow with a strict spiraling symmetry, the same on the north side as on the south, the same to windward as to leeward. Compare the palms, which have a strict geometrical leaf development, with the small leaves that the elm puts forth from freely flowing branches. The elm fills each chink of its environment with a specially tailored structure, while the palm builds the same edifice for every occasion.



The rule stands: cracking in elastic materials occurs suddenly, around 120° joints; cracking in inelastic material occurs sequentially, and new cracks join old ones at 90°.

Consequently, films and cracks have a great deal in common. Films that are elastic, like films of soap and water, shift in relation to one another to meet at 120°— just like cracks; films that cannot deform their boundaries meet those boundaries at 90°— just like cracks.

•

Nature does not premeditate; she does not use mathematics; she does not deliberately produce whole patterns, she lets whole patterns produce themselves. Nature does what nature demands; she is beyond blame and responsibility.

Only Two Can Play This Game

The other book by G. Spencer Brown, **Only Two Can Play This Game**, *by James Keys is the compliment to* **Laws of Form**. *The substance of* **Only Two Can Play This Game** *is the sexedness of all relationships, and particularly the nature of the feminine. For a culture or an individual psyche that is beginning to realize the absurd condition that attempting to deny the feminine leads to the book is deeply appreciated and welcomed.*

—John Sexton
[Suggested by John Lilly]

Only Two Can Play This Game
James Keys
1971; 144pp.
$1.65 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Man has nothing to say on his own, but what he says he gets from the woman. The woman has it complete but she has no voice to say it, the man is her voice; he is the poet and she is his muse. And if the voice of man divorces from its feminine source and thinks it can say it all on its own, then we get this nightmare— or comedy if you like to look at it that way, ending up with man sitting on the hydrogen bomb.

•

The typical western artist bleeds music rather than radiates contentment. He is a christ rather than a buddha. And the uncreative many, who feed parasitically upon the blood of the creative few, conspire to keep the wound open so that the bleeding may not stop.

•

Remember, Ladies and Gentlemen, the well-known law that only what is partial can change what is complete. Your physicists split the atom, you may remember, by bombarding it with parts of atoms, because whole atoms leave it unchanged.

•

At the next level, travelling outwards from within, an extraordinary thing happens. As we come into the sixth level (i.e., the fifth *order*, recollecting that the first level is of order zero) by crossing the fifth 'veil'— mathematically speaking a 'veil' is crossed when we devise an 'outer' structure that embodies the 'rules' of the structure next within— when we cross this fifth veil, a strange thing happens. We find that we cannot in fact cross it (i.e. it is mathematically impossible to do so) without creating *time*.

Two Cybernetic Frontiers

Tape and photo reportage by me. Affords an operational introduction to Gregory Bateson and (change subject) to computer science. Be warned that the only published review considers the book "self-indulgent. . . silly. . . trendy."

—SB

II Cybernetic Frontiers
Stewart Brand
1974; 95 pp.
$2.00 postpaid
from:
Random House Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

All I did was increase my conviction that systemic intellectual clarity and moral clarity must reconvene, mingle some notion of what the hell consciousness is and is for, and evoke a shareable self-enhancing ethic of what is sacred, what is right for life.

Tall order. In the summer of '72 a book began to fill it for me: **Steps to an Ecology of Mind**, Gregory Bateson.

•

To *want* control is the pathology, not that the person gets control because of course you never do."

•

"Job's sin is that he's pious. . . . The correction for piety is natural history."

•

"A paradox," Gregory told his class, "is a contradiction in which you take sides— both sides. Each half of the paradox proposes the other. I think it is so that if you sweat out one of these paradoxes you embark on a sort of voyage, which may include hallucinations and trance and all that sort of stuff. But you come out knowing something you didn't know before, something about the nature of where you are in the universe."

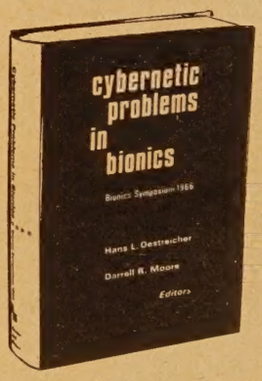
•

"One of the guys wrote a program called The Unknown Glitch,' which at random intervals would wake up, print out **I AM THE UNKOWN GLITCH. CATCH ME IF YOU CAN**, and then it would relocate itself somewhere else in core memory, set a clock interrupt, and go back to sleep. There was no way to find it."

Cybernetic Problems in Bionics

Whole Earth lists a lot of "Bibles." This one is the "Bible" of technical observational cybernetics— using cybernetics to understand biological mysteries, the intricate ways in which life handles form and information. Which, if we understand clearly enough we may participate more deeply in.

—SB
[Suggested by Heinz Von Foerster]



Cybernetic Problems in Bionics
(Bionics Symposium 1966)
Hans L. Oestreicher & Darrell R. Moore, Eds.
1968; 903pp.
$54.00 postpaid
from:
Gordon & Breach, Sci. Pub., Inc.
1 Park Ave.
New York, NY 10016

However good we may think we are, 10^{80} measures something that we do not exceed. The science of the future will be built by brains that cannot have had more than 10^{80} bits used in their preparations, and they themselves will advance only by something short of 10^{80}. This is our informational universe: what lies beyond is unknowable.

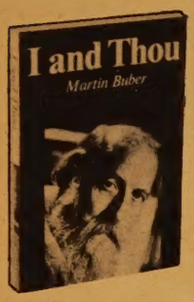
•

The procedure for getting this to work is to start off by letting the subject press a button as before to see the picture. Then, without telling them, we transfer the computer control from the button they have been pressing to the output of their own expectancy waves. Now the culmination of the expectancy wave produces a picture automatically whenever the subject "wants" to see it. To obtain regular results one has to learn to concentrate in a peculiar way on the specific experience one wants to have and not on concentration itself. This is a very odd feeling and when I had been through it I felt a sense of self-revelation, as when one masters a previously mysterious skill such as flying or hitting a ball where one wants it to go.

I and Thou

A discovery more prime than Einstein's Relativity is Buber's distinction between the "experience" of I-It and the "relation" of I-You. It can cure at once the twin pathologies of Transcendent God and Controllable Nature. In "I-You" is the possibility of love that does not possess, as well as the realest perception of learning, which is coevolution. Martin Buber's original German torrent is well served by the new translation and prologue by Walter Kaufmann.

—SB
[Suggested by Ken Kesey]



I and Thou
Martin Buber
1970; 185pp.
$1.95 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 70512
or Whole Earth

I perceive something. I feel something. I imagine something I want something. I sense something. I think something. The life of a human being does not consist merely of all this and its like.

All this and its like is the basis of the realm of It.

But the realm of You has another basis.

•

When I confront a human being as my You and speak the basic word I-You to him, then he is no thing among things nor does he consist of things.

He is no longer He or She, limited by other Hes and Shes, a dot in the world grid of space and time, nor a condition that can be experienced and described, a loose bundle of named qualities. Neighborless and seamless, he is You and fills the firmament. Not as if there were nothing but he; but everything else lives in *his* light.

•

In truth language does not reside in man but man stands in language and speaks out of it.

•

Extended, the lines of relationships intersect in the external you. Every single You is a glimpse of that. Through every single You the basic word addresses the eternal You.

•

A man's relation to the "particular something" that arrogates the supreme throne of his life's values, pushing eternity aside, is always directed toward the experience and use of an It, a thing, an object of enjoyment. For only this kind of relation can bar the view to God, by interposing the impenetrable It-world; the relationship that says You always opens it up again.

•

Whoever says You does not have something for his object. For wherever there is something there is also another something; every It borders on other Its; It is only by virtue of bordering on others. But where You is said there is no something. You has no borders.

Whoever says You does not have something; he has nothing. But he stands in relation.

•

Throughout all of this the tree remains my object and has its place and its time span, its kind and condition.

But it can also happen, if will and grace are joined, that as I contemplate the tree I am drawn into a relation, and the tree ceases to be an It. The power of exclusiveness has seized me.

•

You can read **I and Thou** *in two hours and not get over it for the rest of your life. Buber tells you how you stand, either in a dialogical relationship with the Creative Force or in a position of "havingness" where you are a thing bounded by other things.*

—Ken Kesey

Cream Rises
PHILOSOPHY

I and Thou *Buber's best* 456
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Pilgrim at Tinker Creek *Lady Thoreau* 456
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Manas *Humanist news* 410
Tao Teh King *Taoism* 12
I Ching *Applied philosophy* 433
A Treasury of Traditional Wisdom *Best compendium* 456
Zen and the Art of Motorcycle Maintenance *Thoreau on a bike* 735

Pilgrim at Tinker Creek

As Tom Wolfe did a while back, Annie Dillard Arrived this year upon American consciousness with an introductory paragraph:

I used to have a cat, an old fighting tom, who would jump through the open window by my bed in the middle of the night and land on my chest. I'd half-awaken. He'd stick his skull under my nose and purr, stinking of urine and blood. Some nights he kneaded my bare chest with his front paws, powerfully, arching his back, as if sharpening his claws, or pummeling a mother for milk. And some mornings I'd wake in daylight to find my body covered with paw prints in blood; I looked as though I'd been painted with roses.

And so her book, the prose of a poetess, the insight of a rare Natural Philosopher—— as scientists used to be called (and should again). Thoreau, people compare her to, as she draws many-leveled conclusions from by-the-creekbank observations. A gifted contemplative. As R.K. Welsh wrote to the Epilog, "Tinker Creek flows through us all."

—SB

Pilgrim at Tinker Creek
Annie Dillard
1974; 271pp.
$7.95 postpaid
from:
Harper's Mag. Press
2 Park Ave.
New York, NY 10016
or Whole Earth

Evolution loves death more than it loves you or me. This is easy to write, easy to read, and hard to believe. The words are simple, the concept clear—— but you don't believe it, do you? Nor do I. How could I, when we're both so lovable?

•

The Principle of Indeterminacy turned science inside-out. Suddenly determinism goes, causality goes, and we are left with a universe composed of what Eddington calls, "mind-stuff." Listen to these physicists: Sir James Jeans, Eddington's successor, invokes "fate," saying that the future "may rest on the knees of whatever gods there be." Eddington says that "the physical world is entirely abstract and without 'actuality' apart from its linkage to consciousness." Heisenberg himself says, "method and object can no longer be separated. *The scientific world-view has ceased to be a scientific view in the true sense of the word."* Jeans says that science can no longer remain opposed to the notion of free will. Heisenberg says, "there is a higher power, not influenced by our wishes, which finally decides and judges." Eddington says that our dropping causality as a result of the Principle of Indeterminacy "leaves us with no clear distinction between the Natural and the Supernatural." And so forth.

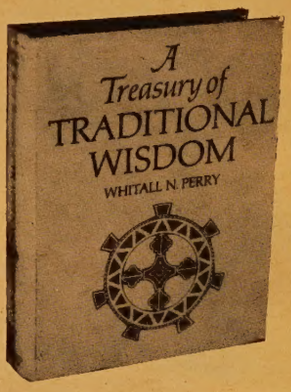
•

Thomas Merton wrote, "There is always a temptation to diddle around in the contemplative life, making itsy-bitsy statues." There is always an enormous temptation in all of life to diddle around making itsy-bitsy friends and meals and journeys for itsy-bitsy years on end. It is so self-conscious, so apparently moral, simply to step aside from the gaps where the creeks and winds pour down, saying, I never merited this grace, quite rightly, and then to sulk along the rest of your days on the edge of rage. I won't have it. The world is wilder than that in all directions, more dangerous and bitter, more extravagant and bright.

A Treasury of Traditional Wisdom

Mystical insights, once they're rendered back into language, come in passionate outbursts of song, in abstract-seeming formulations, in poignant paradoxes, in telegraphic instructions—— in dollops. This astounding collection—— 1144 pages, 180,000 quotations, well chosen, organized, cross-referenced, indexed, and bibliographed, for 15 measley dollars —— undermines a world of ecumenicism with THE GOODS: the harshest statements at the far end of every mystical tradition and literature Earth has. They converge alright, but not without work of your own.

—SB
[Suggested by George de Alth]



A Treasury of Traditional Wisdom
Whitall N. Perry, ed.
1971; 1144pp.
$15.00 postpaid
from:
Simon and Schuster
One W. 39th St.
New York, NY
10018
or Whole Earth

Image worship is very necessary for beginners.

—Swami Sivananda

•

The master said, 'Everything that exists is God.' The pupil understood it literally, but not in the right spirit. While he was passing through the street he met an elephant. The driver shouted aloud from his high place, 'Move away! Move away!' The pupil argued in his mind, 'Why should I move away? I am God, so is the elephant God; what fear has God of himself?' Thinking thus, he did not move. At last the elephant took him up in his trunk and dashed him aside. He was hurt severely, and going back to his master, he related the whole adventure. The master said: 'All right. You are God, the elephant is God also, but God in the shape of the elephant-driver was warning you from above. Why did you not pay heed to his warnings?'

—Sri Ramakrishna

•

Who is she that looketh forth as the morning, fair as the moon, clear as the sun, and terrible as an army with banners?

—Song of Solomon, VI. 10

•

When you wake up you will find that this whole world, above and below, is nothing other than a regarding of oneself

—Hakuin

•

This man is known by five signs. First, he never complains. Next, he never makes excuses: when accused, he leaves the facts to vindicate him. Thirdly, there is nothing he wants in earth or heaven but what God wills himself. Fourthly, he is not moved in time. Fifthly, he is never rejoiced: he is joy itself.

—Eckhart

•

(A Sufi) was asked: 'Who is a Sufi?' He replied: 'He who neither possesses nor is possessed.'

—Al-Kalabadhi

•

The man who possesses a knowledge of God, will not be very ambitious.

—Sextus the Pythagorean

•

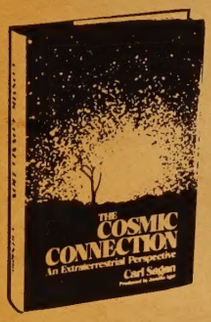
'Where did you learn this from?' asked Nanpo Tsek'uei. 'I learned it from the Son of Ink,' replied Nu Yu, 'and the Son of Ink learned it from the Grandson of Learning, the Grandson of Learning from Understanding, and Understanding from Insight. Insight learned it from Practice. Practice from Song, and Song from Silence, Silence from the Void, and the Void learned it from the Seeming Beginning.'

—Chuang-tse

The Cosmic Connection

From the American co-author of the classic **Intelligent Life in the Universe** *(Pg.312) comes further speculation, further data (Mariner photos of Mars and interpretation), further probing of what the notion "further" can get you into. Deep space, that's what. . . exterior and interior.*

—SB



The Cosmic Connection
(An Extraterrestrial Perspective)
Carl Sagan
1973; 274pp.
$7.95 postpaid
from:
Anchor
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Jokes are a way of dealing with anxiety. There is a class of jokes dealing with extraterrestrial life. In one, the extraterrestrial visitor lands on Earth, walks up to a gasoline pump or a gumball machine—— the accounts differ—— and asks, "What's a nice girl like you doing in a place like this?"

•

So we gazed at each other for a while in something of a standoff—— man and dolphin, with a meter of water between us. Suddenly, Elvar came booming out of the water head first, until only his tail flukes were in contact with the water. He towered over me, doing a kind of slow back-pedaling, then uttered a noise. It was a single "syllable," high-pitched and squeaky. It had, well, a sort of Donald Duck timbre. It sounded to me that Elvar had said "More!"

I bounded out of the room, found John attending to some electronic equipment, and announced excitedly that Elvar had apparently just said "More!"

John was laconic. "Was it in context?" was all he asked.

"Yes, it was in context."

"Good, that's one of the words he knows."

Eventually, John believed that Elvar had learned some dozens of words of English. To the best of my knowledge, no human has ever learned a single word of delphinese. Perhaps this calibrates the relative intelligence of the two species.

•

Our own universe is very likely itself a vast black hole. We have no knowledge of what lies outside our universe. This is true by definition, but also because of the properties of black holes. Objects that reside in them cannot ordinarily leave them. In a strange sense, our universe may be filled with objects that are not here. They are not separate universes. They do not have the mass of our universe. But in their separateness and their isolation they are autonomous universes.

There is an even more bizarre prospect. In one speculative view (Chapter 36), an object that plunges down a rotating black hole may re-emerge elsewhere and elsewhen—— in another place and another time. Black holes may be apertures to distant galaxies and to remote epochs. They may be short-cuts through space and time. If such holes in the fabric of the space-time continuum exist, it is by no means certain that it would ever be possible for an extended object like spacecraft to use a black hole for travel through space or time. The most serious obstacle would be the tidal force exerted by the black hole during approach—— a force that would tend to pull any extended matter to pieces. And yet it seems to me that a very advanced civilization might cope with the tidal stresses of a black hole.

•

Cream Rises

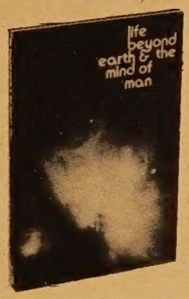
COSMOS

Cosmic View	*Best intro*	5
Intelligent Life in the Universe	*Classic Sagan*	312
Star Maker	*Best fiction*	5
Atlas of the Universe	*Best coffee table*	6
The Cosmic Connection	*Recent Sagan*	487
The Unexpected Universe	*From here*	6
Hubble Atlas of the Galaxies	*Photo collection*	5

Life Beyond Earth & The Mind of Man

Good for NASA. Cosmic interplay at a symposium by Carl Sagan, George Wald, Philip Morrison, and others. Disturb your meditations.

—SB



Life Beyond Earth & The Mind of Man
(A symposium held at Boston University on November 20, 1972)
Richard Berendzen, Ed.
1973; 106pp.
$1.60 postpaid
from:
Superintendent of Documents
Government Printing Office
Washington, DC 20402
or Whole Earth

Some years ago I heard the silly question asked: Why is our world 4-1/2 billion years old?" And the silly answer: "Because it took that long to find that out." That is a profound thought and it raises another thought that is meaningful in our time: When you have got to the point at which you find that out, have you got much longer to go? That is our problem.

—Wald

•

I think the most important thing the message will bring us, if we can finally understand it, will be a description, if one exists at all, of how these beings were able to fashion a world in which they could live, persevere, and maintain something of worth and beauty for a long period of time.

—Morrison

•

What I am imagining is that when the facts I have just stated become generally known, people will know that there are a million other civilizations, all fabulously ugly, and all a lot smarter than us. Knowing this seems to me to be a useful and character-building experience for mankind.

—Sagan

The Myth of the Eternal Return

Addicted to our own "history," we seem to be demonstrating that the complete self-made man is the suicide.

Other, stabler, cultures see their origins and guidelines in Cosmos instead. This is a book of such illogical, sacred, healthy practices. Author Eliade considers it his best book.

—SB

The Myth of the Eternal Return
(or, Cosmos and History)
Mircea Eliade
1954; 195pp.
$2.45 postpaid
from:
Princeton Univ. Press
Princeton, NJ 08540
or Whole Earth

The chief difference between the man of the archaic and traditional societies and the man of the modern societies with their strong imprint of Judaeo-Christianity lies in the fact that the former feels himself indissolubly connected with the Cosmos and the cosmic rhythms, whereas the latter insists that he is connected only with History. Of course, for the man of the archaic societies, the Cosmos too has a "history," if only because it is the creation of the gods and is held to have been organized by supernatural beings or mythical heroes. But this "history" of the Cosmos and of human society is a "sacred history," preserved and transmitted through myths. More than that, it is a "history" that can be repeated indefinitely, in the sense that the myths serve as models for ceremonies that periodically reactualize the tremendous events that occurred at the beginning of time.

•

We might say that the archaic world knows nothing of "profane" activities: every act which has a definite meaning —— hunting, fishing, agriculture; games, conflicts, sexuality, —— in some way participates in the sacred.

•

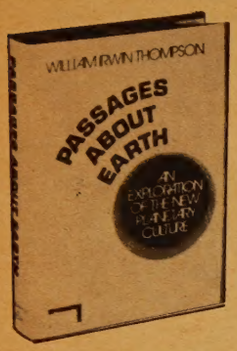
What does living mean for a man who belongs to a traditional culture? Above all, it means living in accordance with extrahuman models, in conformity with archetypes. Hence it means living at the heart of the *real* since—— as Chapter I sufficiently emphasized—— there is nothing truly real except the archetypes. Living in conformity with the archetypes amounted to respecting the "law," since the law was only a primordial hierophany, the revelation *in illo tempore* of the norms of existence, a disclosure by a divinity or a mystical being. And if, through the repetition of paradigmatic gestures and by means of periodic ceremonies, archaic man succeeded, as we have seen, in annulling time, he none the less lived in harmony with the cosmic rhythms; we could even say that he entered into these rhythms (we need only remember how "real" night and day are to him, and the seasons, the cycles of the moon, the solstices).

And running out of Coprates were features that were very curious indeed—— sinuous channels, meandering through the highlands above the Coprates Valley and graced with beautiful little tributaries. If such channels had been seen on Earth, they would unhesitatingly have been attributed to running water. But on Mars the surface pressures are so low that liquid water would instantly vaporize, just as the pressures on Earth are so low that liquid carbon dioxide vaporizes instantly. . . . The channels revealed by *Mariner 9* speak eloquently of the possibility of massive climatic change on Mars. In this view, Mars is today in the throes of an ice age, but in the past—— no one knows just how long ago—— it possessed much more clement and Earth-like conditions.

Passages About Earth

Emerging planetary mythology explored by an escaped historian consulting other explorers and their ideas— NASA, Illich, Peccei, Gopi Krishna, Soleri, magical Findhorn, etc. (See also Thompson's preceding **At the Edge of History.**)

—SB



Passages About Earth
(An Exploration of the New Planetary Culture)
William Irwin Thompson
1973; 206pp.
$6.95 postpaid
from:
Harper & Row Genl. Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Nothing except a religious experience could surpass the elevation of that host. We had all been prepared for spectacle; but when the engines ignited, the night went away, and the force of the rocket entered my body. There was no heavy blast that hurt my ears; instead, the engines beat in a subtler rhythm that went directly and physically into the chambers of the heart and made all the valves stammer in astonishment. If it weren't for the joy and exhilaration of the crowd, I would have wondered if my heart would stop. But as I felt my heart continue with the progress of the rocket in the sky, I threw away anxiety and leaped up with the others in the sheer joy of knowing that men were turning tables on the heavens and riding that comet out of earth.

•

In a world in which men write thousands of books and one million scientific papers a year, the mythic *bricoleur* is the man who plays with all that information and hears a music inside the noise.

•

At the end of the line for industrial society, we discover that it's a spiral and that we have turned and are now facing back in the direction of cosmic mythology. Now all the old maps take on a new meaning as they warn us, "Here be dragons." Ecstasy *or* economics, madness *or* sanity, mysticism *or* science: where ancient dragons live modern categories die.

•

When you know what you are looking for, it is certainly not hard to find it. Von Daniken wants to find holes blasted out by rockets, so he takes the round wells of the Maya, the *cenote* at Chichén Itzá, and says that the limestone well is the result of a rocket blast. Curiously enough, he is willing to take the huge monolithic platform of the temple of Baalbek in Lebanon, which has no holes scoured out by rockets, and say that this, too, was a launching pad for rockets. Next he goes to the plain at Nazca in Peru to say that the long lines that can be seen only from the air are landing strips for the ships from space. The image of a World War II prop job chug-chugging in from Andromeda and needing a landing strip a few miles long is hilarious, but von Daniken is not sensitive to the perils of what Whitehead called "misplaced concreteness."

Vital Question

Where are the Earth's erogenous zones?

[Please address answers to Vital Question, Box 428, Sausalito CA 94965.]

Perspective

Eugene Schoenfeld, M.D. recently made this comment in his column in **The Pacific Sun.**

Several years ago Tiburon artist John Kyrk suggested a way to get a better look at what's really going on in our world. "Why not," John said one day, "have television cameras on stationary satellites facing Earth?" Each television set would have at least one channel featuring at all times— Earth. We're quite beautiful viewed from outer space. Space Lab astronauts at this moment see us all together floating through time, part of something knowable but yet unknown.

No better way has been suggested to get everyone centered. It's cheap, easy and would bring world-wide tranquility. How to gain perspective? Do it literally.

The Friends of the Earth T-Shirt

Each FOE T-Shirt features a hand-printed silk-screened photo of the Earth in black, blue, and white. Each shirt is unique.

The T-Shirt is made of top-quality, 100 percent cotton.

Sizes available: small, medium, large, and extra-large.

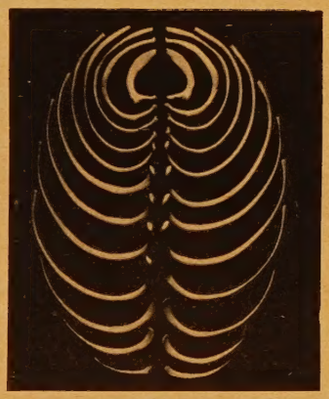
The cost— a mere $3.95 (California residents add 6% sales tax.)

FRIENDS OF THE EARTH
Department CQ
529 Commercial Street
San Francisco CA 94111

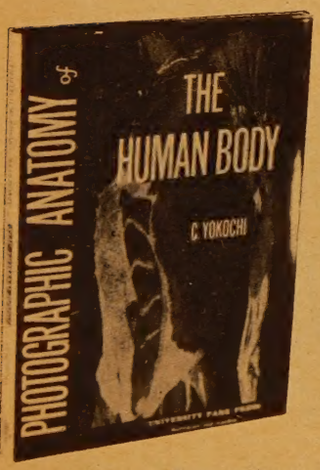
Photographic Anatomy of the Human Body

As your home can never seem the same after looking down on it from the air, your physical self-image is due for changes on viewing these beautiful color photos of human organs, cross-sections, bone and muscle structures, an intricate universe within the skin. Hand the book to anyone; they become riveted. (See also Pg. **604**)

—SB
[Suggested by Tom Bender]



RIBS



A cross-section through the thigh

Photographic Anatomy of the Human Body
C. Ynkochi
1971; 101pp.
$14.50 postpaid
from:
University Park Press
Chamber of Commerce Bldg.
Baltimore, MD 21202
or Whole Earth

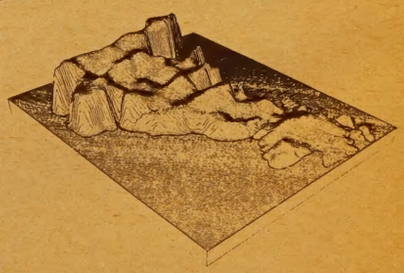
1. falx cerebri
2. cerebral hemisphere
3. tentorium cerebelli
4. cerebellar hemisphere
5. medulla oblongata
6. cervical enlargement
7. spinal ganglions
8. lumbar enlargement
9. conus medullaris
10. cauda equina

Mental Maps

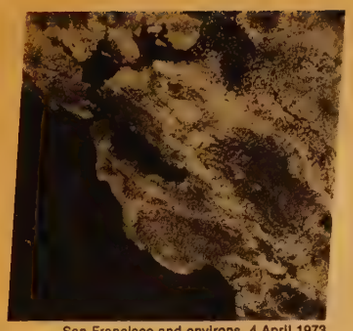
Geography of preference, of perception, of knowledge. Excellent ideas and research, implying a whole different topology in human affairs than standard atlases show.

—SB

Mental Maps
Peter Gould and Rodney White
1974; 204pp.
$1.45 postpaid
from:
Penguin Books Inc.
7110 Ambassador Rd.
Baltimore, MD 21207
or Whole Earth



A preference map of England, computer drawn, as seen looking south and west. Undesirable Scotland on the right, much-loved London environs on the left. "The depression in the south is the Metropolitan Sinkhole, while the lump further north is the Lake District Dome."



San Francisco and environs, 4 April 1973

EARTH SATELLITE PHOTOS FROM EROS

by John J. Vollmer

There is a new and cheap way to play "armchair astronaut"—buy images taken by ERTS, the Earth Resources Technology Satellite. They will show the world as you would have seen it yourself from a satellite 567 miles above San Francisco, New York City, the Great Lakes, the Rocky Mountains or your very own hometown. The clarity in these images is fantastic and often many details are revealed that you might not be able to discern from the ground or from maps: earthquake faults, silt in rivers, patterns of fields, density of vegetation, even cities and highways become visible.

Actually the "pictures" are not exactly what you would have seen from the window in your satellite—they are not photographs but "images," taken with narrow bands of radiation. The cameras sense radiation in four specific bands, wavelengths of 500-600, 600-700, 700-800 and 800-1100 nanometers, nm. Your eye would have registered all wavelengths from 400-800 nm; so the first three bands are more selective than your eye, and the last one consists of radiation invisible to you, infrared radiation. Separate images in each band are printed black and white. If all images are superimposed, special printing gives a colored image, but the colors are "false," they are not what we would have seen ourselves: green vegetation is red, clear blue water is black, water with silt is blue, "concrete" cities are blue and clouds are white.

Cream Rises
EARTH

NASA Earth Photo Books *Endlessly beautiful* 7

EROS *Space perspective to order* 459

Times Atlas of the World *Best* 9

Man's Domain *Cheapest good atlas* 9

Goode's World Atlas *Bargain* 459

Our World from the Air *Out of print classic* 11

Geology Illustrated *Understanding earth surface* 10

Interpretation of Aerial Photographs *Reading Earth surface* 459

Surface Anatomy *Lovely human surface* 10

Photographic Anatomy of the Human Body *Lovely human organs* 458

Passages About Earth *Planetary culture* 458

for EARTH ALIVE, see Pg. 460
for PLANET ECONOMICS, see Pg. 464-7

Copies of these images can be bought from the EROS Program (Earth Resources Observation Systems) at cost: black and white (at 600-700 nm) 9" x 9" - $1.75 and 18" x 18" - $3.50; color composite 9" x 9" - $7.00 and 18" x 18" - $15.00. Each image covers an area of 115 miles x 115 miles. To see these images before ordering, go to the local "ERTS browse file;" there are many such locations throughout the country. These files are open to the public (after all, we did pay for the whole system) and help is available. Actually, the selection procedure is quite simple:

1) for areas in the continental USA use the "Quick Response System" (QRS) which is a collection of the best images for each area;
2) find the QRS code number for the area of interest from a wall map;
3) with this code number locate the images of the area on a microfilm;
4) with a special order form, order the images of your choice from the EROS Data Center, Sioux Falls, S.D., 57198;
5) for images of Alaska and Hawaii consult the ERTS Coverage Index—it is a maze of code numbers;
6) for images of the rest of the world, use a special file which is organized according to the longitude and latitude of each locality;
7) EROS Centers also handle images from the Skylab, Apollo and Gemini missions, ask the assistant for help;
8) if you do not live near a browse file, write to the EROS Data Center, specifying the longitude and latitude of the desired area. They will send you a free computer print-out of the image available. Or you may telephone (605) 594-6511.

Note: The ERTS images are not covered by copyrights, because we all own them.

For more info order from any EROS Center, all free:

1) "The EROS Program" (Reprint No. 167), which explains the whole program and lists all browse files;
2) "Studying the Earth from Space," a well-illustrated booklet;
3) a sample color composite, a specific image with attached explanations.

If you are willing to spend a little more money, the Department of Agriculture has assembled ERTS images into mosaics covering the whole country. These can be bought in sections, such as the whole West Coast, for example. These large images are available only in black and white reproductions; for more info write to Remote Sensing Coordinator, Department of Natural Resources, Resources Inventory Section, Olympia, Wash. 98504.

EROS Program

Browse files are in the following locations: Sioux Falls, SD; Washington, DC; Albany, NY; Boston, MA; Bay St. Louis, MO; Denver, CO; Phoenix, AZ; Los Angeles, CA; Spokane, WA; Anchorage, AK; Menlo Park, CA; Rolla, MO; Tallahassee, FL; Portland, OR; Chattanooga, TN; Honolulu, HI; Sacramento, CA; with additional centers in the Canal Zone, Guam, American Samoa, Mariana Islands.

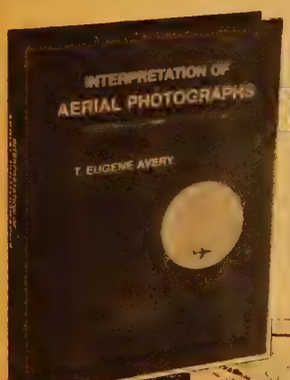
The National Oceanographic and Atmospheric Administration (NOAA) also has established browse files for the ERTS images, with the following additional locations: Hillcrest Heights, MD; Rockville, MD; Silver Spring, MD; Miami, FL; Norfolk, VA; Garden City, NY; Woods Hole, MA; Asheville, NC; Detroit, MI; Kansas City, MO; Fort Worth, TX; Salt Lake City, UT; Norman, OK; Boulder, CO; La Jolla, CA; Tiburon, CA; Seattle, WA; Madison, WI; College Station, TX.

WHOLE SYSTEMS

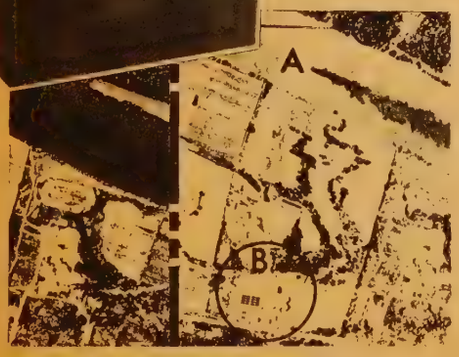
Interpretation of Aerial Photographs

Aerial photos are easily obtained (see Pg. 78). Learn how to read them for tree species, geological trends, camouflaged missile sites, industrial pollution, and the peculiar configuration of your yard. The best book.

—SB



Interpretation of Aerial Photographs
T. Eugene Avery
1962; 1968; 324pp.
$11.95 postpaid
from:
Burgess Publishing Co.
7108 Olms Lane
Minneapolis, MN 55435
or Whole Earth



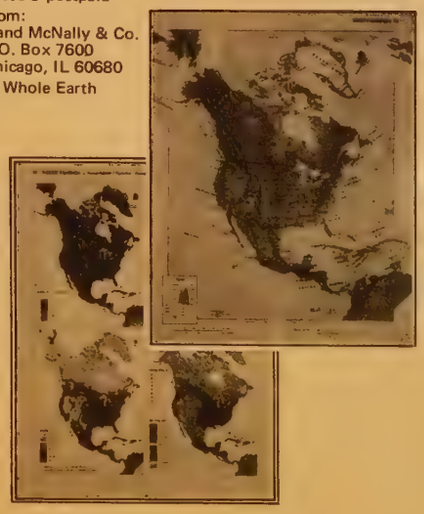
A sewage outfall below the surface of the Tennessee River produced the dark pollution pattern (A) on this photograph taken near Chattanooga; the sewage treatment plant is encircled (B). The dark coloration of the effluent is an indication of low dissolved oxygen levels, a situation detrimental to fish and other aquatic life. Scale is about 1,667 feet per inch. Courtesy of U.S. Department of Agriculture.

Goode's World Atlas

One thing I found missing in the **Last Whole Earth Catalog** *was the recommendation of the BEST atlas (non-road type) available: it is not a Hammond or the standard Rand McNally you find with no topographic features and each country or state in a different pastel shade, but a little one published by Rand McNally called* **Goode's World Atlas**, *now in its 14th edition I believe. In addition to a fine method for projecting the entire earth at once (homoloine), the maps give a much better idea what the world earth is like than most. Best of all are the many "thematic" maps showing weather, cultures, production, consumption, vegetation, etc.*

—David Brook

Goode's World Atlas
(14th Edition)
Edward B. Espenshade, Jr., Ed.
$4.95 postpaid
from:
Rand McNally & Co.
P.O. Box 7600
Chicago, IL 60680
or Whole Earth



Io

Richard Grossinger, author of **Solar Journal** *(Pg. 13), is the editor of this periodical rich-mix. I first read cybernetic anthropologist Roy Rappaport in* **Io**. *Michael McClure's essay "Wolf Net" is in the current volume—called* **Biopoesis**. *Far the most detailed planetary imaging I know is going on among American poets—find much of it here.*

—SB

Io
Richard Grossinger, Ed.
1974; 300pp.
$10/4 issues
from:
Io
RFD 2, Box 135
Creamery Rd.
Plainfield, VT 05667

VI (99 THESES)

1. MAN IS A CARNIVORE EXPERIENCING HIMSELF.
2. MAN IS A MAMMAL.
3. THE UNIVERSE IS THE MESSIAH.
4. THE CREATURE IS ONE BEING.
5. ONE BEING IS POLYTHEISM.
6. THE 27 SENSES ARE EXTRUSIONS OF MESSIAH.
7. THE SENSES ARE GODS AND GODDESSES.
8. THE MAMMAL & THE STAR ARE EQUAL
9. THE STARS ARE A GAS.
10. THE GALAXIES ARE A LIQUID.
11. ALL LIFE IS A MEAT SCULPTURE FREED OF TIME, SPACE, & DIMENSION.

The National Atlas of the United States

New, expensive, comprehensive. Use it at your library or nearest U.S. Geological Survey office.

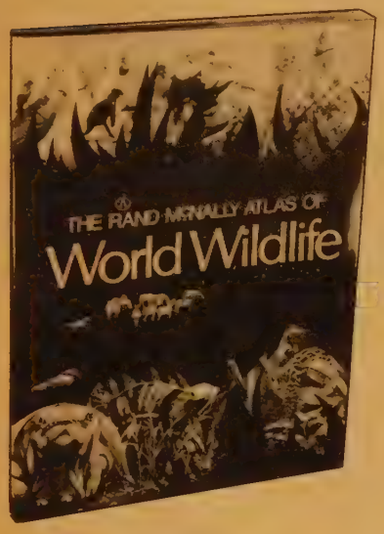
—SB

The National Atlas of the United States
1970; 431pp; 765 maps
$100 postpaid
from:
Washington Dist. Section
U.S. Geological Survey
1200 South Eads St.
Arlington, VA 22202

The Atlas of World Wildlife

The Fascinating World of Animals *divides the world into "biomes"—— tundra, inland waterways, deserts, deciduous forests, jungle, etc. Lumping biomes gives a clear picture of parallel and convergent evolution—— how jeraboas and kangaroo rats look and act alike though they are very different genetically.* **The Atlas of World Wildlife** *divides the world by evolutionary history (called "faunal realms"). The realms are roughly equivalent to the continents—— not habitats —— of earth. Each realm includes characteristic animals like the koala, kiwi and kangaroo of the Australian realm. Realms emphasize genetic connections and migrations since prehistory—— not adaption. Well, this Atlas is simply spectacular—— incredible amounts of facts. accurate and interesting drawings and photographs. Julian Huxley introduces the Atlas and throughout his sensitivity pervades.*

—Peter Warshall (PW)



The Atlas of World Wildlife
1973; 207pp.
$25.00 postpaid
from:
Rand McNally and Co.
P.O. Box 7600
Chicago, IL 60680
or Whole Earth

Cream Rises
EARTH ALIVE

Rand McNally Atlas of World Wildlife
Outstanding coffee table **460**

Atlas of Evolution
Best visual on evolution **462**

Fascinating World of Animals
Illustrated detail **460**

Soils and Vegetation: A World Picture
The living substrate **493**

Man's Role in Changing the Face of the Earth
First, classic big look **17**

The Biosphere *Finite, seething* **8**

Man's Impact on the Global Environment
The toll **28**

Fascinating World of Animals

This book is a great Family book. Beautiful photographs of the world's animals arranged by the place they live: tundras, jungles, ocean edge, inland waters, deserts. Brings together parts of the world distant in mileage but close in habitat. Incredibly well written. Parents will dig the up-to-date information in the photo captions, while everyone will dig seeing a jeraboa in the Sahara looking so much like the Mojave kangeroo rat.

—PW

Reader's Digest Fascinating World of Animals
1971; 428pp.
$14.95 postpaid
from:
W.W. Norton & Co., Inc.
500 Fifth Ave.
New York, NY 10036
or Whole Earth

A climber's foot The tokay gecko's feet, like those of most geckos, have pads of microscopic hooks that can grip the smoothest surfaces. This animal's name was derived from its cry

Protected pupils To prevent dazzle during the day and to allow the formation of a precise image, the pupils of the tokay gecko's large eyes close to form four tiny holes

Continents Adrift

To quote the editor: "Most scientists regarded the earth as rigid and the continents as fixed, but now the surface of the earth is seen as . . . . deformable and the continents as "rafts" floating on a "sea" of denser rock. The continents have repeatedly collided and joined, repeatedly broken and separated in different patterns. . ." This is the great mind change of the late sixties and early seventies—— now taking place in Western thought. The Continent you stand on is moving out. I know of no better selection of writings.

—PW

Continents Adrift
(Readings from Scientific American)
1972; 172pp.
$3.50 postpaid
from:
Cooper Freeman & Co.
1736 Stockton St.
San Francisco, CA
94133
or Whole Earth

Planet/Drum

An occasional bunch of ecological, geographical, poetical, reportorial oddments selected for their context-altering value.

—SB

Planet/Drum
Peter Berg, etc. Ed.
Quarterly bundle
$10/yr
from:
Box 31251
San Francisco, CA
94131

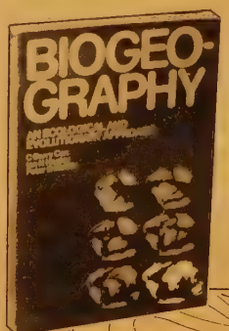
hey, coyote, do you figure there's any hope for all these human beings?
"what human beings, and who you calling coyote?"

—peter blue cloud

Biogeography

Every animal species has made and is making planetary movements and settlements. Biogeography tries to make it all sound coherent. From micro-movement to continental drift, **Biogeography** *is the technical twin of the* **The Atlas of World Wildlife.**

—PW



Biogeography
(An Ecological and Evolutionary Approach)
Cox/Healey/Moore
1973; 379pp.
$9.95 postpaid
from:
John Wiley & Sons, Inc.
One Wiley Drive
Somerset, NJ 08873
or Whole Earth

Gradual extension of the distribution of the European starling in North America from 1905 to 1955.

Cream Rises
ECOLOGY

Fundamentals of Ecology *THE standard text* **461**

Animal Ecology *Elegant classic* **461**

Perspectives in Ecological Theory *Cybernetic Ecology* **462**

Ecology *(Ricklefs) First great synthesis of ecology & evolution* **461**

Ecology *(Odum) Ecosystems & habitats* **32**

Concepts of Ecology *Modern, academic* **32**

Basic Ecology *Best intro* **461**

Centers for Short-Lived Phenomena *Research opportunity flashes* **490**

Ecology

Dumb title. This is not classical ecology—— there are no descriptions of biomes (tundra vs. desert) nor chapters entitled "limiting factors" or "population dynamics." Every chapter is a synthesis of the most current scientific thought relating population genetics to population ecology.

Relatedness is the genius of this text. A bee's ability to see ultraviolet is related to flower coloration and bee/flower complex is related to the evolution of pollination and food gathering by insects. The body weight of mammals is related to the size of the home range and both weight and range are then related to hunting vs. cropping lifestyles. The cryptic and disruptive patterns on fish are related to predator-prey population cycles and the genetic components. The concepts of hip evolutionary theory and hip energy ecology flow fast and furious. The prose and mathematics are academic.

—PW

Figure 14-6. Face views of an owl and a rabbit showing the forward placement of the eyes in a predator for binocular vision and depth perception, and placement of the eyes to the side of the head to maximize the visual field in a species that is often preyed upon.

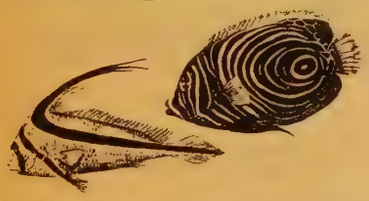
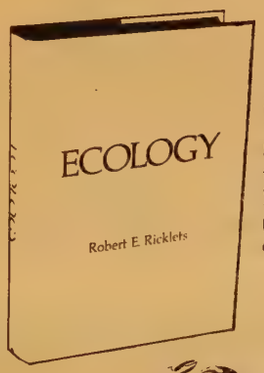


Figure 16-3 Examples of crypsis achieved by disruptive coloration in the Jackknife fish (left) and the Angelfish (right). If the contrast is strong enough one tends to see the pattern rather than the fish itself (after Laglar, Bardach and Miller 1962)



Ecology
Robert E. Ricklefs
1973; 861pp.
$15.00 postpaid
from:
Chiron Press
1816 S.W. Hawthorne Terrace
Portland, OR 92201
or Whole Earth

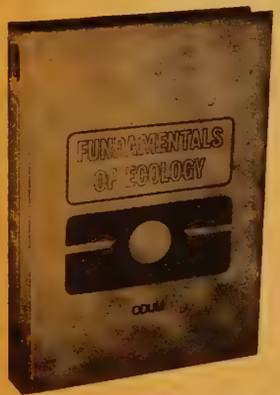
Figure 29-8 An example of Williston's Law. The ancient trilobite (left) has many, similar segments and appendages. The modern crab (right) has relatively few, specialized segments and legs (after Simpson 1949).

One of the reasons for man's astounding biological success is the extremely rapid rate of cultural evolution. Man's culture evolves too fast for organisms to keep pace with it genetically. The modes by which cultural information is transmitted produce more frequent mistakes than occur in genetic inheritance, thereby increasing the variability available for cultural evolution. It would indeed seem unlikely that cultural transmission by learning could match the precision of molecular application involved in the inheritance of genetic information.

Fundamentals of Ecology

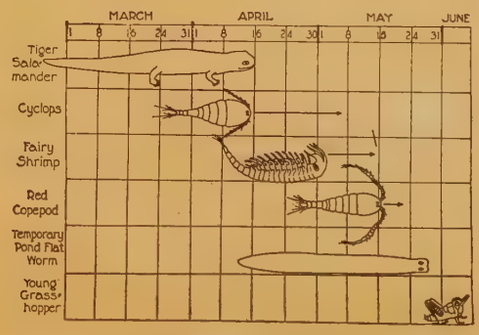
The living encyclopedia of ecology. The third edition has transformed into three short books: Principles and Concepts of Ecology; The Habitat Approach; and Applications and Technology. This edition has the NEW mathematics (a chapter on systems ecology), the NEW methodologies (a chapter, for instance, on remote sensing as an ecological tool), and CONTEMPORARY problems (chapters on radiation ecology, pollution, and resources). At the same time, **Fundamentals of Ecology** *retains good, short, crisp discussions of terrestrial, marine and estuarine habitats. If you want one academic, reference book on serious ecology, this is it.*

—PW



Fundamentals of Ecology
(Third Edition)
Eugene P. Odum
1971; 574pp.
$11.75 postpaid
from:
W.B. Saunders Co.
West Washington Square
Philadelphia, PA 19105
or Whole Earth

For each cycle it is also convenient to designate two compartments or pools: (1) the *reservoir pool*, the large, slow-moving, generally non-biological component, and (2) the *exchange or cycling pool*, a smaller but more active portion that is exchanging (i.e., moving back and forth) rapidly between organisms and their immediate environment. From the standpoint of the biosphere as a whole biogeochemical cycles fall into two basic groups: (1) *gaseous types*, in which the reservoir is in the atmosphere or hydrosphere (ocean), and (2) *sedimentary types*, in which the reservoir is in the earth's crust.



Succession of animals in a temporary pond in Illinois. The length of the animal's body plus the length of the arrow indicates the dates between which the adults of each of the five species were found. The drying up of the pond and appearance of land organisms is indicated by the young grasshopper. (From Welch, modified after Shelford, 1919.)

"Ecology"

There are three aspects or steps I go through again and again in order to develop a stronger ecological consciousness——

Step 1: Separate out the study of natural communities from all politics and fads.

Step 2: Learn the various models, ideas, interpretations, and abstract principles and concepts that Western scientists have thought up in order to explain natural communities.

Step 3: Learn the practice and application of ecology for the 1970's. In other words, re-enter the human politics.

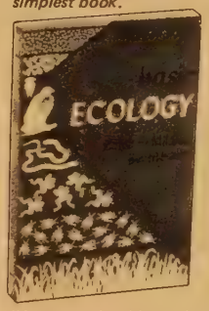
This page contains books for Step 2—— learning the concepts and ideas. The Land Use section contains the tools needed for Steps 1 and 3. The conceptual ecology books differ greatly in complexity. Here is the best selection I know ranging from simplest to most abstruse.

—Peter Warshall

Basic Ecology

About as basic as you can get. So basic that I think this book is either for children or a solid reminder to specialists that have lost the forest for the trees. If you're tired of just talking "ecology" and "environment" and want to be introduced to the science, this is the easiest and simplest book.

—PW



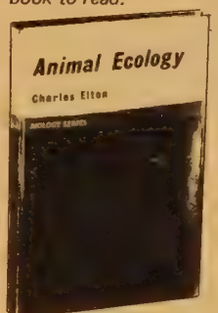
Basic Ecology
Ralph and Mildred Buchsbaum
1957; 195pp.
$2.50 postpaid
from:
The Boxwood Press
183 Ocean View Blvd.
Pacific Grove, CA
93950
or Whole Earth

"A person should not shoot a bird resting on his own head" is a saying of one of the Bantu tribes of South-West Africa, and it is not intended to be a guide to the hunter. Any Bantu who can hunt hardly needs such advice. It is a legal maxim, and advises anyone engaged in a legal dispute not to testify against a relative lest he harm himself. Since one's interdependence with some other person is not always obvious, the proverb is put into terms of a direct physical connection that anyone can understand.

Animal Ecology

Charles Elton practically invented the words "niche," "food chain," and "pyramid of numbers." At this point in his life (1926), he had the easiest and clearest writing style of any living ecologist. This is a classic—— equivalent to Darwin in its straightforward presentation and love of natural history. An easy book to read.

—PW



Animal Ecology
Charles Elton
1966; 206pp.
$3.00 postpaid
from:
Halsted Press
605 3rd Ave.
New York, NY 10016
or Whole Earth

There is no getting away from the fact that good ecological work cannot be done in an atmosphere of cloistered calm, of smooth concentrated focussing upon clean, rounded, and elegant problems. Any ecological problem which is really worth working upon at all, is constantly leading the worker on to neighbouring subjects, and is constantly enlarging his view of the extent and variety of animal life, and of the numerous ways in which one problem in the field interacts with another. In the course of field work one should have a rather uncomfortable feeling that one is not covering the whole ground, that the problem is too big to tackle single-handed, and that it would be worth finding out whether So-and-so (a botanist) would not be able to co-operate with benefit to both, and that it might be worth while getting to know a little about geology or the movements of the moon or of a dog's tail, or the psychology of starlings, or any of those apparently specialised or remote subjects which are always turning out to be at the basis of ecological problems encountered in the field.

Perspectives in Ecological Theory

High theoretics. The substantial hope that our myriad ecological observations might form a coherent perspective. Difficult to understand if you are unfamiliar with ecological jargon but, for those who wish to struggle through the prose, this book is totally mindbending. Margalef has a way of crystallizing whole books into one sentence.

—PW

Perspectives in Ecological Theory
Ramón Margalef
1968; 111pp.
$5.50 postpaid
from:
University of Chicago Press
11030 South Langley Ave.
Chicago, IL 60628
or Whole Earth

Information contained in nature— why nature is as it is and not otherwise— allows us a partial reconstruction of the past. Only a hypothetical universe composed of pure energy would be without a past. In any material system interactions and cybernetic mechanisms appear, and with them stores of information. Organisms constitute a wonderful example, but this process of history-making and history-telling is by no means restricted to the organic world. The development of the meanders in a river, the increasing complexity of the earth's crust through successive epochs of orogenesis, are information-storing devices in the same manner that genetic systems are. Moreover, all such cybernetic systems are naturally self-organizing systems. Information is expressed by a mechanism, and storing information means increasing the complexity of the mechanism. The success of life springs from miniaturization. It depends on the packing, in a small space, of a prodigious number of overlapping mechanisms, wonderfully persistent by virtue of built-in regulatory circuits and sufficiently open to carry into the future a promise of new developments.

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THE TRIPLE CHANNEL OF TRANSMISSION OF INFORMATION

Now I want to go back to the first chapter and the subject of nature as a channel of information. Only a universe of energy could have no past. If there is matter, structures grow and differentiate and a past can be recognized and partially reconstructed. It is the problem of durationless nonmatter versus enduring matter (Fokker 1966). At one end of the spectrum is biblical chaos, a past without a past, because no matter exists to convey information. At the other end there is only information and no decisions— static information forever. We and the entire universe are caught in between, with the wonderful opportunity to enjoy creation. Some sophisticated people would rather speak of existential anxiety, but biologists in general and field naturalists in particular are really childlike and enjoy nature like a child playing in a mud puddle after the rain has given way to sunny skies.

A closer examination of the ecosystem, considered as a channel of information, allows one to separate three different layers, or subchannels. One is a genetic channel in replicable individual structures. Another is a truly ecological channel based on the interaction between different cohabiting species and expressed in the relative constancy or in the regular changes of their numbers. This channel is the one continually referred to throughout this book. A third channel may be called 'ethological' (because ethology is the science of animal behavior) or 'cultural'; it transmits what has been learned by individual activity or experience and is transmitted to future generations outside the genetic channel. This last channel had a negligible importance at the beginning of life but it is now increasing explosively. In it can be placed: formation of trails and burrows that are used by other individuals, accumulation of dead material, imprinting, imitative collective behavioral memory and formation of local traditions, and the legacy of tools and all cultural manifestations in man. Indulging in a figure of speech, one can say that it runs from the dead wood in the forest that preserves a structure to the wood transformed into paper in our libraries that preserves culture. And as books usually contain more information than tree trunks (or at least more readable information), it is clear that the conversion of trees into books will go on for some time.

Evolution Mandala

The Evolution Mandala, a full-color 35" x 49" poster of Dion Wright's 10-foot painting, costs $5 postpaid

from:
Thofra
Box 308
Sausalito CA
94965

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Atlas of Evolution *Best coffee table* **462**

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Advanced classic **30**

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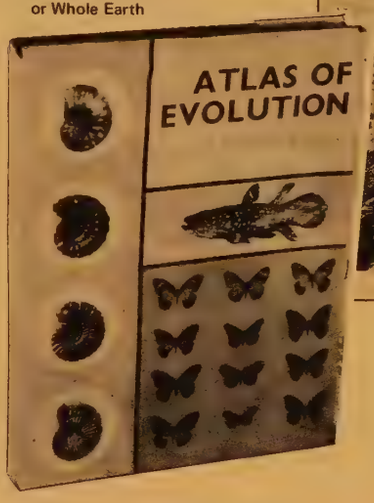
The CoEvolution Quarterly *Hip evolution* **450**

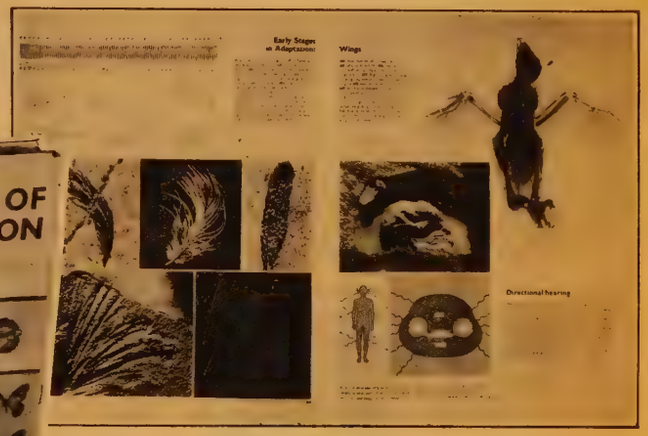
Atlas of Evolution

By far the best graphic presentation and text summary of the present Theory of Evolution. Sir Gavin de Beer is a substantial authority. If you don't have a coffee table to put him on, get one.

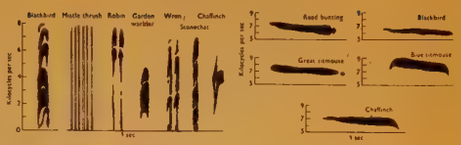
—SB

Atlas of Evolution
Sir Gavin de Beer FRS
1964; 202pp.
$15.00 postpaid
from:
Thomas Nelson, Inc., Publishers
P.O. Box 946
Nashville, TN 37203
or Whole Earth





Adaptation: Sonic Mimicry



56-58. Recordings taken by P. Marler of the calls of various animals (to be read like music, kilocycles proportional to pitch). 56. When calls are sharp, short, repeated and cover a wide range of pitch, they are easy to locate as when birds 'mob' an owl. 57. Continuous calls at the same medium pitch, beginning and ending gently, are difficult to locate (cryptic), as in the alarm-calls of small birds, many species of which use the same call when a bird of prey flies overhead, and benefit from the alarm given by any one of them.

•

As there are about 50 cell-generations in the course of development of a man from the single fertilized egg-cell, the chromosomes divide 2^{50} times during that period in the thousand million million cells of every man in every generation.

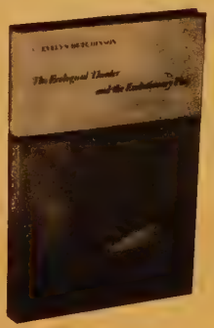
•

One of the most striking proofs that the incidence of mortality in nature is high can be obtained from a comparison of the length of life of animals when exposed to the full blast of competition and adverse conditions in nature, and when kept in the shelter of captivity. By the method of ringing and sampling a population of wild birds, it is possible to estimate their average age under natural conditions. For the robin this is under one year, whereas a captive robin can be expected to live for 11 years. For a blackbird the expectation of life in nature is eighteen months; in captivity it is 20 years. For a herring-gull, the comparable figures are 2.8 and 44 years respectively. These figures will suffice to show that Darwin's deduction that there is a high rate of mortality in nature is true.

The Ecological Theater and the Evolutionary Play

Hutchinson is intimate with genetics and has lots of wonderfully intelligent ideas about genetics and natural selection. Unless you can glide through sentences about genetic polymorphisms and subspecific hybrids, the prose will be too technical to enjoy. Check this book out at a library before purchasing.

—PW



The Ecological Theater and the Evolutionary Play
G. Evelyn Hutchinson
1965; 139pp.
$6.50 postpaid
from:
Yale University Press
302 Temple St.
New Haven, CT 06511
or Whole Earth

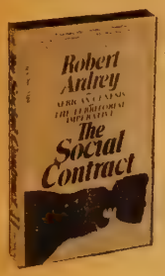
From a deeper molecular point of view any organism in its phenotypic expression is the projection into the macroscopic world of a most complex microscopic molecular pattern. This, coupled with the property of self-duplication, often gives the members of a biological species a much greater unity than the pebbles in a stream bed, or any other comparable macroscopic collection of objects in nature.

•

The Social Contract

For years I've been prepared to dislike Ardrey as a bloody-minded popularizer of the sensational parts of current ideas in ethology and the sciences of proto-man. Well, that's all true. He's also careful, eloquent, original, gutsy, and damned useful in figuring how we shall manage with people. This, his third book, I find the most applicable.

—SB



The Social Contract
Robert Ardrey
1970; 405pp.
$2.36 postpaid
from:
Lucas Book Co.
2430 Bancroft Way
Berkeley, CA 94704
or Whole Earth

The function of society as a playing field governed as in any other sport by goals and rules may seem of less compelling reward to the individual than the functions of defense and education. Yet these are the rules that protect him from the depredations of his fellows, as concerted defense protects him from the depredations of others. And there is more to it than that. Perhaps we might resurrect a hypothesis of innate needs that I projected toward the close of **The Territorial Imperative.**

I suggested that in all higher animals, including man, there are basic, inborn needs for three satisfactions: identity, stimulation, and security. I described them in terms of their opposites: anonymity, boredom, and anxiety. They vary in hierarchy, since the need of the female for security must quite apparently be greater than in the male. The endowment and experience of the individual must likewise dictate varying degrees of this need or that. To a surprising degree, however, security ranks lowest among our needs, and the more thoroughly we achieve it, the more willingly do we sacrifice it for stimulation. So long as we live in a milieu of material deprivation, the illusion that security is paramount will enclose us; and many an error of social philosophy has so been written. But let even a minimum of affluence replace deprivation's demands, and security will give way to boredom, a condition to be avoided.

To a degree as surprising as the low rank of security in the hierarchy of need is the high place of identity. To know who you are; to achieve identification in the eyes of your social partners; to sense a fulfillment of the uniqueness that in truth was once yours as a fertilized egg: I submit that it is the ultimate motive. How many people do you know who, given the choice between fame and fortune, will not choose fame? Only when we encounter and accept the ultimate frustration, anonymity, do we turn down the steps of basic needs to the search for mere stimulation, just as we turn up the steps to search for it when, with security satisfied, we encounter boredom.

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As no population could survive without sufficient numbers sufficiently aggressive, so no population could survive were competitions customarily carried to deadly decision. And so has evolved throughout the species that body of rules and regulations of infinite variety which, while encouraging the aggressive, discourages the violent. The problem of man is not that we are aggressive but that we break the rules.

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The hunting band we may calculate as a group of nine, ten, perhaps eleven adult and sub-adult males, supporting a whole society of about fifty.

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This little group vanished into dust; that little group persevered. What was the distinction? Social order, I suggest. We entered the African Pliocene as ramapithecines, without even, for all we know, satisfactory bipedal carriage. We emerged many million years later as the anatomically developed australopithecine, but with a brain still little larger than the ape's. We were men, up to the neck. But I do not believe that anatomical improvement was the major instrument of our survival; it was rather our social capacity to act as one.

Homo Ludens

Huizinga contends that civilization owes its existence to the play element—— to special rituals apart from the daily grind which are joyful, contained in time, space, and rule structure, uncertain in outcome, requiring of fair play, participated in by all. To the roster of convivial tools that Ivan Illich fosters I would add widespread renewal of convivial gaming—— play rituals at every level from family to planet. The more frivolous, the more essential to homo ludens.

—SB

Homo Ludens
(A Study of the Play Element in Culture)
Johan Huizinga
1950; 220pp.
$2.95 postpaid
from:
Beacon Press
25 Beacon St.
Boston, MA 02108
or Whole Earth

All play moves and has its being within a playground marked off beforehand either materially or ideally, deliberately or as a matter of course. Just as there is no formal difference between play and ritual, so the "consecrated spot" cannot be formally distinguished from the play-ground. The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc., are all in form and function play-grounds, i.e. forbidden spots, isolated, hedged round, hallowed, within the ordinary world, dedicated to the performance of an act apart.

Inside the play-ground an absolute and peculiar order reigns. Here we come across another, very positive feature of play: it creates order, *is* order. Into an imperfect world and into the confusion of life it brings a temporary, a limited perfection.

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Archaic society, we would say, plays as the child or animal plays. Such playing contains at the outset all the elements proper to play: order, tension, movement, change, solemnity, rhythm, rapture.

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When an Eskimo has a complaint to make against another he challenges him to a drumming-contest (Danish: *Trommesang*). The clan or tribe thereupon gathers at a festal meeting, all in their finest attire and in joyful mood. The two contestants then attack one another in turn with opprobrious songs to the accompaniment of a drum, each reproaching the other with his misdemeanours. No distinction is made between well-founded accusations, satirical remarks calculated to tickle the audience, and pure slander. For instance one singer enumerated all the people who had been eaten by his opponent's wife and mother-in-law during a famine, which caused the assembled company to burst into tears. This offensive chanting is accompanied throughout by all kinds of physical indignities directed against your opponent, such as breathing and snorting into his face, bumping him with your forehead, prizing his jaws open, tying him to a tent-pole—— all of which the "accused" has to bear with equanimity and a mocking laugh. Most of the spectators join in the refrains of the song, applauding and egging the parties on. Others just sit there and go to sleep. During the pauses the contestants converse in friendly terms. The sessions of such a contest may extend over a period of years, during which the parties think up new songs and new misdeeds to denounce. Finally the spectators decide who the winner is. In most cases friendship is immediately re-established, but it sometimes happens that a family emigrates from shame at having been defeated. A person may have several drumming-matches running at the same time. Women too can take part.

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According to Granet's sketch of Chinese warfare in what he calls the feudal age, there can be no talk of victory unless the prince's honour emerges with enhanced splendour from the field of battle. This is not procured by gaining the advantage, still less by using it to the utmost, but by showing moderation.

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Real civilization cannot exist in the absence of a certain play-element, for civilization presupposes limitation and mastery of the self, the ability not to confuse its own tendencies with the ultimate and highest goal, but to understand that it is enclosed within certain bounds freely accepted. Civilization will, in a sense, always be played according to certain rules, and true civilization will always demand fair play. Fair play is nothing less than good faith expressed in play terms. Hence the cheat or the spoil-sport shatters civilization itself. To be a sound culture-creating force this play-element must be pure. It must not consist in the darkening or debasing of standards set up by reason, faith or humanity. It must not be a false seeming, a masking of political purposes behind the illusion of genuine play-forms. True play knows no propaganda; its aim is in itself, and its familiar spirit is happy inspiration.

The Causes of War

Nuclear proliferation is at hand—— many small nations with short-term governments with little to lose. . . and the Bomb. All the more reason to take a searching nonrhetorical look at war, wars, and try to discern what sense they operate by. Geoffrey Blainey has investigated every international war since 1700. His conclusions are fine hard aphorisms that can be navigated by.

—SB

The Causes of War
Geoffrey Blainey
1973; 278pp.
$7.95 postpaid
from:
Macmillan Publishing Co., Inc.
Order Dept.
Front and Brown Sts.
Riverside (Burlington Co.)
NJ 08075
or Whole Earth

11. Wars usually begin when two nations disagree on their relative strength, and wars usually cease when the fighting nations agree on their relative strength. Agreement or disagreement emerges from the shuffling of the same set of factors. Thus each factor is capable of promoting war or peace.
12. A change in one factor—— the defection of an ally or the eruption of strife in the land of the enemy—— may dramatically alter a nation's assessment of its bargaining position. In the short term that factor could wield an influence which seems irrationally large.
13. When nations prepare to fight one another, they have contradictory expectations of the likely duration and outcome of the war. When those predictions, however, cease to be contradictory, the war is almost certain to end.
14. Any factor which increases the likelihood that nations will agree on their relative power is a potential cause of peace. One powerful cause of peace is a decisive war, for war provides the most widely-accepted measure of power.
15. Even a decisive war cannot have permanent influence, for victory is invariably a wasting asset.
16. A formula for measuring international power is essential: ironically the most useful formula is warfare. Until the function of warfare is appreciated, the search for a more humane and more efficient way of measuring power is likely to be haphazard.

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26. The evidence of past wars does not support the respectable theory that an uneven 'balance' of power tends to promote war. If the theory is turned upside down, however, it has some validity.
27. The evidence of past wars does not support the scapegoat theory and its assumption that rulers facing internal troubles often started a foreign war in the hope that a victory would promote peace at home.
28. The evidence of past wars does not support the 'one pair of hands' theory of war: the belief that a nation busily making money will have no spare energy or time for the making of war.

A Continuous Harmony

There are voices I am glad to hear talking on any subject whatever. Wendell Berry is one, talking in this book of nature poetry, his farm in Kentucky, regionalism, strip mining, discipline, and hope.

—SB
[Suggested by Ed Abbey]

A Continuous Harmony
(Essays Cultural and Agricultural)
Wendell Berry
1970,1972; 182pp.
$5.95 postpaid
from:
Harcourt Brace & Jovanovich, Inc.
757 Third Avenue
New York, NY 10017
or Whole Earth

I begin with the assumption that perhaps the great disaster of human history is one that happened to or within religion: that is, the conceptual division between the holy and the world, the excerpting of the Creator from the creation. Collis is worth quoting again in this connection; though perhaps it may be argued that he is wrong about the cause, I think he is correct in his description of what happened:

> . . .whereas under polytheism the gods were intimately connected with the earth, and stimulated veneration for it, under monotheism deity was extracted from the earth. God was promoted to higher regions. He went completely out of sight. It became possible to fear God without fearing Nature—— nay, to love God (whatever was meant) and to hate his creations.

The Limits to Growth

This book, more than any since Ehrlich's **Population Bomb**, *reached the general public with the news that The Party is About Over. When you take the five principle factors of growth—— present trends in population, agricultural production, natural resources, industrial production, and pollution—— consider them on a planetary scale and run them through a sophisticated computer model, you get an inevitable product. Collapse, within a hundred years. Not a leveling off, but total ruin. And with no likelihood of recovery: the resources are gone.*

If you don't like the news, you've got three options: 1) Ignore the warning and hasten its fulfillment; 2) Successfully challenge the methods of the study so that the conclusion comes out differently; 3) Do something about changing the trends of growth in the real world.

—SB

The Limits to Growth
Meadows, Meadows, Randers, Behrens
1972; 200pp.
$1.25 postpaid
from:
Signet Books
The New American Lib.
1301 Ave. of the Americas
New York, NY 10019
or Whole Earth

Cream Rises

WORLD CRISIS

The Limits to Growth
Collapse. Inarguable. 464

Population Bomb
Clearest warning 24

Population, Resources, Environment
The details 34

The Ecologist
British mag 467

Not Man Apart
Friends of the Earth mag 467

Agenda for Action
Data & plans 464

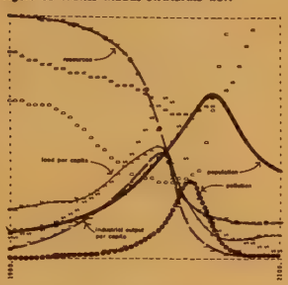
In the Human Interest

At the root of everything going wrong is population. Lester Brown, with information as current and accurate as it comes, with considerable experience at the Overseas Development Council, here proposes—— in detail—— how we CAN level off at 6 billion humans instead of the 10-12 billion that everyone predicts (in 1974 we are approaching 4 billion). It will require effort, change, cost, and trouble aplenty. Consider the alternative.

—SB
[Suggested by Erick Eckholm]

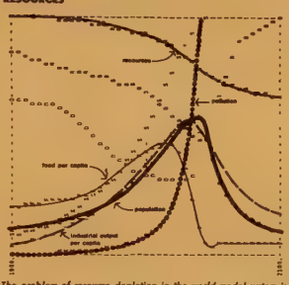
In the Human Interest
Lester R. Brown
1974; 190pp.
$6.95 postpaid
from:
W.W. Norton & Co.
500 Fifth Ave.
New York, NY 10036
or Whole Earth

Figure 35 WORLD MODEL STANDARD RUN



The "standard" world model run assumes no major change in the physical, economic, or social relationships that have historically governed the development of the world system. All variables plotted here follow historical values from 1900 to 1970. Food, industrial output, and population grow exponentially until the rapidly diminishing resource base forces a slowdown in industrial growth. Because of natural delays in the system, both population and pollution continue to increase for some time after the peak of industrialization. Population growth is finally halted by a rise in the death rate due to decreased food and medical services.

Figure 37 WORLD MODEL WITH "UNLIMITED" RESOURCES



The problem of resource depletion in the world model system is eliminated by two assumptions: first, that "unlimited" nuclear power will double the resource reserves that can be exploited and, second, that nuclear energy will make extensive programs of recycling and substitution possible. If these changes are the only ones introduced in the system, growth is stopped by rising pollution, as it was in figure 36.

The behavior mode of the system shown in figure 35 is clearly that of overshoot and collapse. In this run the collapse occurs because of nonrenewable resource depletion. The industrial capital stock grows to a level that requires an enormous input of resources. In the very process of that growth it depletes a large fraction of the resource reserves available. As resource prices rise and mines are depleted, more and more capital must be used for obtaining resources, leaving less to be invested for future growth. Finally investment cannot keep up with depreciation, and the industrial base collapses, taking with it the service and agricultural systems, which have become dependent on industrial inputs (such as fertilizers, pesticides, hospital laboratories, computers, and especially energy for mechanization). For a short time the situation is especially serious because population, with the delays inherent in the age structure and the process of social adjustment, keeps rising. Population finally decreases when the death rate is driven upward by lack of food and health services.

No country, however large or wealthy, can any longer view the future security and well-being of its people in isolation. Increasingly, nations will discover that national problems lack national solutions. All countries share a common global ecosystem. National monetary systems are not independent but part of an international monetary system. Activities altering the climate in one part of the world may trigger changes elsewhere, even if inadvertently. Dependence of national economies on international resource flows is rising with each passing year. One small geographic region, the Middle East, controls the lion's share of the world's known reserves of petroleum. North America controls an even larger share of exportable supplies of grains.

•

Will a 20 percent increase in income for the more affluent among us bring a 20 percent increase in well-being, a 10 percent increase, or any improvement at all? For a man with only a crust of bread, the acquisition of a second crust greatly improves his well-being. For a man with a loaf of bread, an additional crust has little effect.

•

One reason for hoping that family planning rather than famine will solve the threat posed by population growth is that no government has yet used all the resources at its command in order to slow and stabilize its population. The two governments which have thus far come closest to doing this are Singapore and China. Both appear to have achieved substantial results.

Agenda for Action 1974
(The U.S. and the Developing World)
James W. Howe
1974;215pp.
$3.95 postpaid
from:
Praeger Publ. Inc.
P.O. Box 1323
Springfield, MA 01101
or Whole Earth

Agenda for Action 1974

Here it is, the horrorific data base of deepening world disorder along with expert discussions of where the critical path to relief lies. Up-to-date—— a new volume each year.

—SB
[Suggested by Erik Eckholm]

The fourth and *final category* of countries consists of the hard core of seriously troubled countries, totaling about forty in number. Most of these countries are in tropical Africa, South Asia, and the Central American-Caribbean area, but the category also includes Uruguay, and possibly Chile and the Philippines. It is important to realize that these countries together contain some 900 million people—— nearly half the population of the developing world exclusive of China. For this group of countries, the consequences of the changes from 1973 are overwhelmingly negative. Most of these countries not only are the poorest in the world at present, but also have the most dismal growth prospects for the future. Their net share of the identifiable adverse effects of the recent price increases amounts to some $3 billion. In addition, these countries face imponderables such as the cost of reduced direct private investment in the wake of these economic disruptions, or the decline in their export earnings due to the global economic slowdown in 1974. Finally, if the countries in this category are to maintain their development momentum, they will need major additional investments either to increase their food, fertilizer, and energy production to reduce their dependence on these high priced imports, or to establish new export industries to enable them to pay their vastly higher import bills—— or both.

Poorest Developing Countries

Country	Population, mid-1971	Per Capita GNP 1971	Per Capita GNP Growth Rate, 1965-71	Life Expectancy	Birth Rate Per 1,000	Death Rate Per 1,000	Infant Mortality Per 1,000 Live Births	Literacy	Per Capita Energy Consumption, 1971	Total Imports (c.i.f.), 1972	Net Grain Trade 1972	Total Exports (f.o.b.), 1972	Total Reserves, mid-1973
	(mil.)	($)	(%)	(yrs.)				%	(kilgms.)	($ mil.)	($ mil.)	($ mil.)	($ mil.)
Afghanistan	18.3	180	1.6	38	51	27	184[a]	8	27	75	-10.0[b]	90	54
Bangladesh	83.4	70	-0.1	46	43	16[a]	125	22	n.a.	n.a.	-160.0[b]	n.a.	n.a.
Bhutan	0.9	80	0.4	n.a.	47[a]	24[a]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Botswana	0.7	160	4.9	41	44	23	175	20	n.a.	n.a.	-4.9	n.a.	n.a.
Burma	29.6	80	0.1	48	46	17	139	60	68	133	-36.0	111	92
Burundi	3.9	60	0.5	41	48	25	150	10	11	31	-1.0	89	20
Cent. African Republic	1.6	150	1.6	40[a]	46	25	190	5-10	60	35[c]	-1.3[a]	34[c]	2
Chad	4.0	80	2.2	40	48	25	160	5-10	27	61	-2.3	11	6
Dahomey	2.9	100	1.8	39	51	28	149	20	38	n.a.	-2.3	n.a.	31
Ethiopia	26.8	80	1.2	39	46	25	162[a]	5	32	189	-5.6	168	164
Gambia	0.4	140	2.1	41	42	23	125	10	68	98	-1.6[b]	74	30
Guinea	4.2	90	0.3	40	47	25	216	5-10	108	n.a.	-9.8[b]	n.a.	n.a.
Haiti	5.6	120	-0.8	44	44	20	130[a]	10	29	64	-4.7	43	25
India	600.4	110	2.4	51	42	17	139	34	186	2,263	-137.0	2,401	1,335
Kenya	11.7	160	4.3	48	48	18	118[a]	20-25	171	560[d]	-1.8	307[d]	298
Khmer Republic	7.7	130	-2.2	52[a]	45	16	127	41	24	n.a.	-2.2[b]	n.a.	n.a.
Laos	3.2	120	3.5	50	42	17	123[a]	15	91	83[c]	-7.7[a]	6[c]	n.a.
Lesotho	1.1	100	0.5	45	39	21	181	n.a.	n.a.	n.a.	-16.1	n.a.	n.a.
Malagasy	7.2	140	2.5	38	46	25	102	39	n.a.	202	n.a.	164	73
Malawi	4.8	90	2.3	40	49	25	120	22	49	130	-0.2	81	52
Maldives	0.1	90	0.7	n.a.	46	23	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mali	5.5	70	1.0	39[a]	50	27	190	5	25	70	-1.9[b]	17	5
Mauritania	1.2	170	2.1	41	44	23	187	1-5	133	n.a.	-3.0	n.a	n.a.
Nepal	12.0	90	0.6	42	45	23	162[a]	9	9	n.a.	-9.3	n.a.	102[a]
Niger	4.2	100	-4.4	43	52	23	200	5	22	n.a.	+3.5	n.a.	n.a.
Pakistan	68.3	130	3.0	50	51	18	142	16	96	705	+8.2	737	469
Rwanda	3.9	60	2.2	43	52	23	133	10	10	36	-0.5[b]	190	16
Sikkim	0.2	80	0.3	n.a.	48	29	206[a]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Somalia	3.0	70	0.8	40	46	24	190	5	31	73	-10.9[b]	43	39
Sri Lanka	12.9	100	1.8	62	30	8	48	75	163	333	-62.6	313	70
Sudan	17.4	120	-0.9	50	49	18	121	10-15	119	320	-11.0	257	41
Swaziland	0.4	190	0.9	41	52	24	168	36	n.a.	n.a.	n.a.	n.a.	n.a.
Tanzania	14.3	110	3.3	44	47	22	162	15-20	49	406	-1.3	320	141
Togo	2.0	150	2.5	40[a]	51	26	163	5-10	73	n.a.	-1.3[b]	79	35
Uganda	9.3	130	1.6	[illegible]	43	18	160	20	72	250[d]	-3.4	283	16
Upper Volta	5.5	70	1.7	37[a]	49	29	182	5-10	13	n.a.	-3.2[b]	n.a.	56
Western Samoa	0.2	140	0.3	63[a]	41[a]	8[a]	56[a]	86	112	n.a.	-0.8[b]	n.a.	n.a.
Yemen, Arab Republic	6.0	90	2.4	42	50	23	152[a]	10	14	n.a.	-8.9[b]	n.a.	n.a.
Yemen, People's Republic	1.5	120	-7.2	42	50	21	152	10	639	170	-7.0	n.a.	77
Zaire	19.3	90	3.6	43[a]	43	23	115	15-20	77	643	-20.1[b]	690	149

Toward a Steady-State Economy

The Western Manifest Destiny of eternal growth is noisily convulsing its last. Meanwhile who is looking around for what's being born? Credit Daly with a sharp eye. In one comfortable book he has gathered the best essays, papers, analyses, speculations on the holy transition from self-exploitation to simple maintenance. For a healthy world to be accomplished it must first be perceived. Start here.

—SB

Toward a Steady-State Economy
Herman E. Daly, Ed.
1973; 332pp.
$3.95 postpaid
from:
W.H. Freeman & Co.
660 Market St.
San Francisco, CA
94104
or Whole Earth

No part of the earth, not even on a continent-wide basis, is self-sufficient in all critical metals. North America is relatively rich in molybdenum and poor in tin, tungsten, and manganese, for instance, whereas Asia is comparatively rich in tin, tungsten, and manganese and, apparently, less well supplied with molybdenum. The great bulk of the world's gold appears to be in South Africa, which has relatively little silver but a good supply of platinum. Cuba and New Caledonia have well over half the world's total known reserves of nickel. The main known reserves of cobalt are in the Congo Republic, Cuba, New Caledonia, and parts of Asia. Most of the world's mercury is in Spain, Italy, and parts of the Sino-Soviet bloc. Industrial diamonds are still supplied mainly by the Congo.

•

Behavior that is "rational" (consistent with profit maximization) over one time period is irrational over another. My favorite example is that of the village idiot who, when offered the choice between a nickel and a dime, always chose the nickel, much to the villagers' continuing amusement. Finally one day a villager said to him, "Look, I know you are not that stupid; you know a dime is worth more than a nickel— why do you always take the nickel?" To which the "idiot" replied "It's obvious— if I took the dime they would stop making the offer!" Idiocy on one time horizon is cleverness on another. But somehow we manage to choose an accounting period and muddle through, and so we could also in a steady state.

—Herman Daly

Cream Rises
PLANETARY ECONOMICS

Toward a Steady-State Economy
Best essays **465**

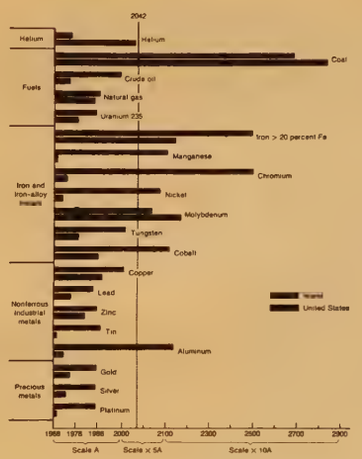
Tools for Conviviality
Good idea **466**

In the Human Interest
Population control **464**

Toward Global Equilibrium
Limits-to-Growth details **465**

Times Atlas of the World
For serious planning **9**

Topsoil and Civilization *Best agricultural overview* **490**

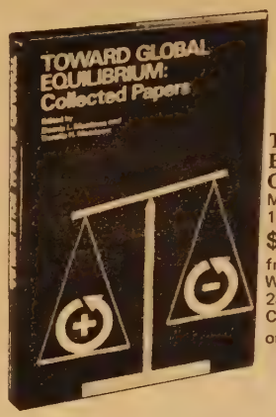


Mineral reserve lifetimes. Apparent lifetimes of known recoverable reserves of twenty mineral commodities at currently minable grades and existing rates of consumption. (Except for helium, whose lifetime is estimated from U.S. Bureau of Mines data on reserves, conservation practices, and expected increases in demand.) Such lifetimes tend to increase with new discoveries and technological advances and to decrease with increasing population and per capita consumption rates, but resources to left of vertical dashed line are in obvious danger of depletion.

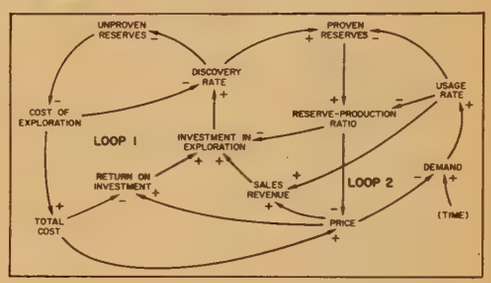
Toward Global Equilibrium: Collected Papers

If **Limits to Growth** *gets you, go a level deeper with Volume II (Vol. III will be called* **The Dynamics of Growth in a Finite World***). Here be dragons. Computer-model studies of needs cycling upward while supply cycles down— negative feedback meets positive feedback (mathematical hysteria) and loses. Damn good modeling— rare around computers.*

—SB



Toward Global Equilibrium: Collected Papers
Meadows & Meadows, Eds.
1973;353pp.
$18.00 postpaid
from:
Wright-Allen Press, Inc.
238 Main St.
Cambridge, MA 02142
or Whole Earth

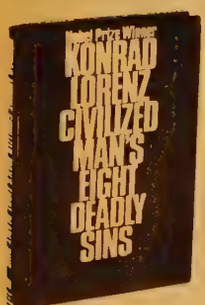


Causal-loop diagram of the natural resource discovery model.
Note: The algebraic sign, plus or minus, at the head of each arrow expresses the polarity of influence between the two variables linked by that arrow. For example, as PRICE increases, SALES REVENUE increases (a positive relationship), and as PRICE increases, DEMAND decreases (a negative relationship).

Civilized Man's Eight Deadly Sins

There is little preaching, much formal insight, and fine anecdotes in this summary book of advice by the founder of ethology (the science of behavior). The ultimate Dutch uncle.

—SB



Civilized Man's Eight Deadly Sins
Konrad Lorenz
1973; 107pp.
$4.95 postpaid
from:
Harcourt Brace & Jovanovich, Inc.
757 Third Ave.
New York, NY 10017
or Whole Earth

My late friend, the psychiatrist Ronald Hargreaves, in one of his last letters to me, wrote that when trying to understand a mental disorder, he had made it his method to ask *two* questions: first, what is the normal survival function of the disturbed system and, second, what is the nature of the disturbance, in particular whether it has been caused by an over- or an underfunction of a part system.

•

An experienced Viennese teacher of the blind once told me that young people who in a suicide attempt had shot themselves in the head and become blind for life, had never again tried to take their own lives. Not only did they go on living, but they matured into balanced, even happy people. A similar case I know of concerns a woman who, as a girl, had jumped out a window, breaking her back; though paralyzed from the waist down, she later managed to live a happy and contented life. With all these young people, a genuinely challenging obstacle with which they found themselves confronted made life again worth living.

Says Stephanie Mills,

WHOLE SYSTEMS

Tools for Conviviality

What does Illich mean by "tool?" A car is a tool. So are the machines, the factory, the company, and the industry that make it. A scalpel is a tool—— but so is a doctor, the AMA, a medical school, and the medical profession. Machines, corporations, institutions, professions, units of government—— all are tools.

What is wrong now is that the tools are too big. They have turned us from tool-users into tool-tenders. The tools shape the product and the work.

A society of large tools cannot be democratic, egalitarian, socialistic, humane, and just. It must be hierarchical, exploitive, bureaucratic, and authoritarian. If the day comes when all of humanity's wants can be supplied by a few giant tools, the people who tend them will rule the world. (See Vonnegut's **Player Piano.***) Illich wants us to make a society of tools to which we all may have access, and which we will direct and use to meet our own felt needs.*

—John Holt

In **Tools for Conviviality**, *Illich takes to the foil and the dagger, and displays fencing skills that could shame not only The Three Musketeers together, but even when supported by their friend d'Artagnan. The argument by the energy pushers and peddlers—— even those they never could dream of—— are tossed in the air singly or in dozens so that they become visible to all, and when they come down he chops them to tiny bits and pieces. This is accompanied by the pyrotechnics of Roman Candles, Morning Stars, Niagara Falls, etc., and two bands playing the Marseillaise. Open the book anywhere, and out comes a bang: "Education becomes necessary not only to grade people for jobs but to upgrade them for consumption."; "When maddening behavior becomes the standard of society, people learn to compete for the right to engage in it."; "Poets and clowns have always risen up against the oppression of creative thought by dogma."; "Throughout the world, highly capitalized tools require highly capitalized men."; etc.*

—Heinz Von Foerster

Tools for Conviviality
Ivan Illich
1973; 135pp.
$1.25 postpaid
from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Convivial tools are those which give each person who uses them the greatest opportunity to enrich the environment with the fruits of his or her vision. Industrial tools deny this possibility to those who use them and they allow their designers to determine the meaning and expectations of others. Most tools today cannot be used in a convivial fashion.

•

Some institutions are structurally convivial tools. The telephone is an example. Anybody can dial the person of his choice if he can afford a coin. If untiring computers keep the lines occupied and thereby restrict the number of personal conversations, this is a misuse by the company of a license given so that persons can speak. The telephone lets anybody say what he wants to the person of his choice; he can conduct business, express love, or pick a quarrel. It is impossible for bureaucrats to define what people say to each other on the phone, even though they can interfere with—— or protect—— the privacy of their exchange.

Most hand tools lend themselves to convivial use unless they are artificially restricted through some institutional arrangements. They can be restricted by becoming the monopoly of one profession, as happens with dentist drills through the requirement of a license and with libraries or laboratories by placing them within schools. Also, tools can be purposely limited when simple pliers and screwdrivers are insufficient to repair modern cars.

•

I have identified five realms in each of which the efficiency of tools can upset the balance of life. Faulty technology can render the environment uninhabitable. Radical monopoly can force the demand for affluence to the point of paralyzing the ability to work. Overprogramming can transform the world into a treatment ward in which people are constantly taught, socialized, normalized, tested, and reformed. Centralization and packaging of institutionally produced values can polarize society into irreversible structural despotism. And, finally, engineered obsolescence can break all bridges to a normative past.

•

The transition to a stationary state in the production of goods and perhaps even of energy will usher in an explosive growth in the production of invisible commodities such as information, education, and fun.

•

Almost overnight people will lose confidence not only in the major institutions but also in the miracle prescriptions of the would-be crisis managers. The ability of present institutions to define values such as education, health, welfare, transportation, or news will suddenly be extinguished because it will be recognized as an illusion.

Small is Beautiful

"If the renaissance is to have an economist to make its case before the world, E.F. Schumacher is the man." So says Theodore Roszak in his introduction to **Small is Beautiful.** *I think the claim bears out.*

Schumacher begins with an assault on industrial growth, liquefier of three forms of 'capital' on which industrial development depends. He states the three as: fossil fuels (oil, coal, natural gas), biological capital, and the human substance. Fossil fuels are running down. An industrial system cannot create or recycle burnt fuels and no industrial system could persist without them. Even nuclear power must be run on fossil fuel supplements.

Biological capital Schumacher calls the "tolerance margins of nature." By this I hope he means the energy in protoplasm and the diversity of valuable information in ecosystems. The evolution of monoculture maximizes growth, diverts energy, and excludes information. Monoculture, made possible by the burning of fossil fuels, abuses biological capital.

Human substance is harder to grasp, but ever so vital. In its essence it is trial and freedom, diversity of culture, and opportunity for error. Advanced and successful technology overseen by experts poses the threat and in no place is the threat more visible than atomic reactors. In no place is it better worded than in this paragraph from a technician of the technology: We nuclear people have made a Faustian compact with society: we offer an almost unique possibility for a technologically abundant world for the on-coming billions, through our miraculous, inexhaustible energy source; but this energy source at the same time is tainted with potential side effects that, if uncontrolled, could spell disaster.

Social controls must be designed by these same technicians to assure that no radioactive quantities escape from reactors, transport, storage, or reprocessing. It is a technology that insists on a "world society in which wars or civil disturbances can never happen." Large mistakes oughtn't happen either. The blackboard postulates a highly ordered, infertile, and crystalline social organization. Not worth living in.

He sums with this: "the modern industrial system consumes the very basis on which it has been erected. To use the language of the economist, it lives on irreplaceable capital which it cheerfully treats as income."

—Jim Harding
[Suggested by Sterling Bunnell]

Small is Beautiful
(Economics as if People Mattered)
E.F. Schumacher
1973; 290pp.
$3.75 postpaid
from:
Harper & Row
Keystone Indust. Pk.
Scranton, PA 18512
or Whole Earth

Give a man a fish, as the saying goes, and you are helping him a little bit for a very short while; teach him the art of fishing, and he can help himself all his life. On a higher level: supply him with fishing tackle; this will cost you a good deal of money, and the result remains doubtful; but even if fruitful, the man's continuing livelihood will still be dependent upon you for replacements. But teach him to make his own fishing tackle and you have helped him to become not only self-supporting, but also self-reliant and independent.

•

It could well be that rich people treasure peace more highly than poor people, but only if they feel utterly secure—— and this is a contradiction in terms. Their wealth depends on making inordinately large demands on limited world resources and thus puts them on an unavoidable collision course—— not primarily with the poor (who are weak and defenceless) but with other rich people.

•

What is it that we really require from the scientists and technologists? I should answer: We need methods and equipment which are
- — cheap enough so that they are accessible to virtually everyone;
- — suitable for small-scale application; and
- — compatible with man's need for creativity.

Out of these three characteristics is born non-violence and a relationship of man to nature which guarantees permanence. If only one of these three is neglected, things are bound to go wrong.

Do Not Write In This Space
For Office Use Only

Blueprint for Survival

There is so far one (1) detailed model of how to arrive at a steady state on a national level. For a change it makes human as well as mathematic sense. For a change there are matters here to vote FOR. Excellent.

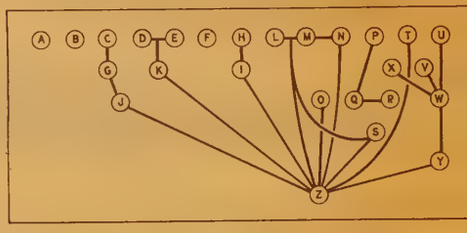
—SB

Blueprint for Survival
The Editors of
The Ecologist
1970; 189pp.
$5.95 postpaid
from:
Houghton Mifflin Co.
Wayside Road
Burlington, MA
01803
or Whole Earth

As Stephen Boyden has pointed out, people use their cars for four main reasons: to go to work, to go to the countryside, to visit friends and relations, and to show off. In the stable society, however, each community will provide its own jobs, there will be countryside around it, most friends and relations will be within it, and there will be much more reliable and satisfying ways of showing off.

This brings us to the second stage of the changeover, in which industry turns to the invention, production, and installation of technologies that are materials- and energy-conservative, that are flexible, nonpolluting, and durable, employment-intensive and favoring craftsmanship.

•



Schematic Outline of Change

a. establishment of national population service
b. introduction of raw materials, amortization and power taxes; antidisamenity legislation; air, land, and water quality targets; recycling grants; revised social accounting systems
c. developed countries end commitment to persistent pesticides and subsidize similar move by undeveloped countries
d. end of subsidies on inorganic fertilizers
e. grants for use of organics and introduction of diversity
f. emergency food program for undeveloped countries
g. progressive substitution of nonpersistent for persistent pesticides
h. integrated-control research program
i. integrated-control training program
j. substitution of integrated control for chemical control
k. progressive introduction of diversified farming practices
l. end of road building
m. clearance of derelict land and beginning of renewal program
n. restrictions on private transport and subsidies for public transport
o. development of rapid mass transit
p. research into materials substitution
q. development of alternative technologies
r. decentralization of industry: part one (redirection)
s. decentralization of industry: part two (development of community types)
t. redistribution of government
u. education research
v. teacher training
w. education
x. experimental community
y. domestic sewage to land
z. target date for basic establishment of network of self-sufficient, self-regulating communities

•

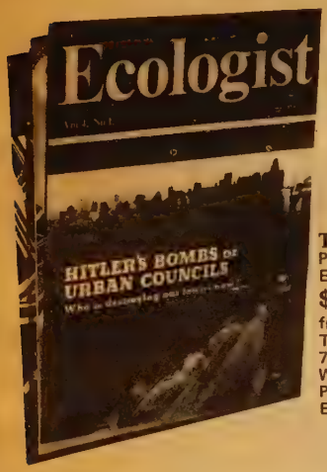
The role played by technology must increase by positive feedback and our society must become ever more addicted to it. In these circumstances, unless technological innovatio can proceed indefinitely at an exponential rate, then it is only a question of time before a disequilibrium occurs for which there is no technological solution, which must spell the complete breakdown of the system.

The Ecologist

A fine harsh mix of scientific and political expertise. British perspective (a bit nearer the Edge than ours.)

—SB

[Suggested by Paul Ehrlich]



The Ecologist
Peter Bunyard, Edward Golsmith, eds.
$12/yr. monthly
from:
The Ecologist
73 Molesworth St.
Wadebridge, Cornwall
PL27 7DS
ENGLAND

The conditions for the reappearance of large-scale epidemics are rapidly becoming more and more favourable. Population density is increasing. The resistance of urban-dwellers to disease is being progressively reduced as the levels of the different pollutants build up in their bodies. Mobility is increasing, thereby effectively spreading disease to areas where the population has not developed natural controls; and germs are rapidly becoming resistant to antibiotics. . . .Whether or not there are epidemics to add to our afflictions, a serious recrudescence of infectious disease can be expected.

Contrary to popular belief, these have not been conquered. The so-called miracle drugs have only granted us temporary respite. Gonorrhoea, for instance, which a few years ago was considered totally under control is now, after the common cold, the second most widespread disease in the United Kingdom.

•

As food becomes scarce and expensive, more and more marginal land will be turned over to agriculture. This means that any nature reserves and national parks with agricultural potential will be brought under the plough.

Ecotage

Ecotage is effective, somewhat dangerous, somewhat out of fashion, easily misused, and. . . effective. Here are accounts of The Fox, the Chicago ecoteur, and numerous suggestions for local action. Hit the companies where they are amazingly vulnerable—— in the image.

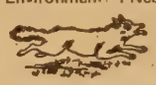
—SB

Ecotage
Sam Love &
David Obst, Eds.
1972; 188pp.
$1.25 postpaid
from:
Pocket Books
Simon & Schuster, Inc.
One West 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

The man who calls himself "The Fox" was slightly winded. It had been a busy three days. . . . On Sunday night, he crawled out on a railroad bridge that crosses the Indiana Toll Road to put up a sign 60 feet long. The sign read: "We're Involved— in Killing Lake Michigan. U.S. Steel." . . .On Tuesday he showed up in the Loop, with a stack of cardboard signs under his arm.

He strolled into the Woolworth store, on Washington near State, and put one in the window.

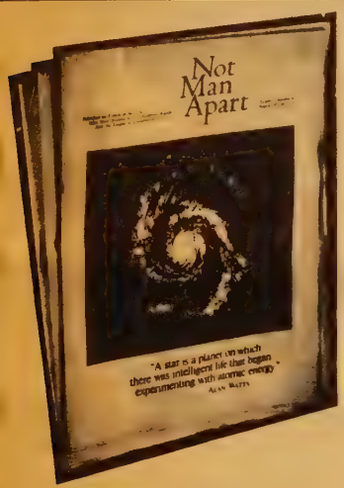
"Nobody paid any attention to me. I just put it in the window and walked out." Then he watched with pleasure as people stopped, their eyes caught by the wording: "I Can't Stop Killing Your Environment. I Need the Profits. U.S. Steel."



Not Man Apart

This newsprint semi-monthly and the glossy **Audubon** *(Pg. 374) are the two best environmental periodicals we have—— both flourishing greenly among the dead dry stalks of* **Clear Creek, Earth Times, Ecology Today,** *and the rest. Friends of the Earth, the publisher, is in the thick of most of the environmental battles which may account for the magazine's vigor. Good service.*

—SB



Not Man Apart
Tom Turner, Ed.
$5/yr, bimonthly
from:
Friends of the Earth
529 Commercial St.
San Francisco, CA
94111

. . . the greatest beauty
is organic wholeness
the wholeness
of life and things,
the divine beauty
of the universe.
Love that,
not man apart from that. . .

—Robinson Jeffers

"Chaining" is to these pinyon-juniper forestlands what clearcutting is to a pine forest – only more so. The Forest Service and BLM have been "chaining" wildlife habitat to benefit ranchers.

Conservation Directory

"A List of Organizations, Agencies and Officials Concerned with Natural Resource Use and Management". Exhaustive listing of names and addresses: government (including U.S. Congressional Committees), private citizens' groups, universities, 12 pages on Canada.

—Richard Nilsen

Conservation Directory
1974
(A List of Organizations, Agencies and Officials Concerned with Natural Resource Use and Management)
William E. Clark, Ed.
1974; 206pp.
$2.00 postpaid
from:
The National Wildlife Federation
1412 Sixteenth St., N.W.
Washington, D.C.
20036
or Whole Earth

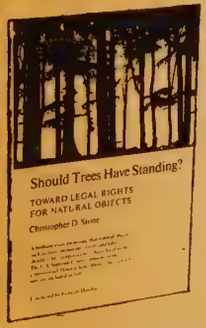
Should Trees Have Standing?

Yes.

Read why in this splendid essay that swayed the Supreme Court. Ecological health is (sequentially) a biological, spiritual, moral, ethical, and, now, legal matter. Economic is next.

—SB

[Suggested by Bob Ornstein]



Should Trees Have Standing?
(Toward Legal Rights for Natural Objects)
Christopher D. Stone
1972; 102pp.
$2.75 postpaid
from:
Walter Kaufmann, Inc.
One First Street
Los Altos, CA 94022
or Whole Earth

It is no answer to say that streams and forests cannot have standing because streams and forests cannot speak. Corporations cannot speak either; nor can states, estates, infants, incompetents, municipalities or universities. Lawyers speak for them, as they customarily do for the ordinary citizen with legal problems.

•

Wherever it carves out "property" rights, the legal system is engaged in the process of *creating* monetary worth.

•

"Rights" might well lie in unanticipated areas. It would seem, for example, that Chief Justice Warren was only stating the obvious when he observed in *Reynolds vs. Sims* that "legislators represent people, not trees or acres." Yet, could not a case be made for a system of apportionment which *did* take into account the wildlife of an area?

THE BIG STRANGE PICTURE

Strange?

Estranged. While our growth curves shoot the moon our sense of normal has rotated 90% from horizontal to vertical. The parasite has lost all sense of its host.

You rave beautifully.

Maybe the parasite never did sense its host, though I've not met a native culture that didn't know and celebrate its place. I was in a dream with Gregory Bateson the other night, playing my usual Boswell to his Samuel Johnson. Walking down a hallway I asked him what was the difference between a growing system and a mature one. "Measured medium," he said, and departed. The meaning I puzzled out of it (in the dream) was that a growing system measures only itself and eats to grow, whereas a mature system measures itself and its medium and eats to balance.

Checked that with Bateson?

I'm afraid to.

Have you checked any of your Apocalyptic Enthusiasm with anything besides other Apocalyptic Enthusiasts?

Of course not. It's all second-hand or speculation. My culture goes to great effort to insulate me from any experience of privation. The price of gas and food is up, as if reflecting a coming scarcity instead of just the cost of delivery. That's the first thing besides talk to reach me. The reason I believe that the Apocalypse is not merely a self-fulfilling prophecy is those absolute quantities on the old Ball of oil, coal, arable land, and standing room. "It's a bit hard," said David Crosby, "to bullshit the ocean. It's not listening, you know what I mean?"

Nuclear power might, no set-up, really might invalidate your whole beef.

And a dome really might not leak. But they always do. A single "perfect" technological skin doesn't make it—— one pinhole and you're wet. There's no redundancy, no margin. Nuclear technology requires vast perfection—— elaborate containers and transport for a vicious brew of radiation, zero-defect reactors, a huge managerial reich, sabotage-proof administration. It's a Satanic price.

No doubt you have a better program.

Yeah. A steady-state energy-economy coupled with a growth information-economy.

Beg pardon?

Figure that the growth information-economy goes on anyway—— call it cultural evolution or Fuller's "doing more with less" or McLuhan's implosion—— it's doing fine. But the energy-economy is approaching a bend-or-bust point. Scribbled:

What's that upward angle after the bend?

That's points for sophistication and for being wise about bending.

You got it all figured out, huh.

Not likely. Nor figure that anyone can figure it out—— not if it's healthy. Human consciousness is too narrow to contain the big balance. We got power galore but as Ehrlich says, Power is not control.

What is?

Variant parallel systems. Local self-interest kept local by local competition and whole-system level-seeking—— not homogenization, please.

Does that mean anything?

It means some respect and trust in controls besides our own. . . a lot of wholesome inefficiency. . . and renewed knowledge that participation in the sacred requires playing fair.

By whose rules?

Right.

Rite?

—SB

Cream Rises

ENERGY

"Energy, Ecology, & Economics" (Article) *"Net energy" losses* 469
Environment, Power, and Society *Intro to "energetics"* 8
The Character of Physical Law *Elegant physics* 6
Energy & Equity *Speed enslaves* 468
Poisoned Power *Nuclear vanity* 468

For "alternative energy" schemes and dreams—— wind, solar, methane, and such—— see Pp. 527-540.

Energy and Equity

One hell of a book. Half the reason I like it is format. Here are author and publisher working to extend developing ideas to critics. The address of the author is included, invitation to criticize is extended, and opportunity for corrections is allowed by the promise of future editions. The book is 84 pages—— pamphlet length—— concisely phrased, with a spine so you can read its title on the bookshelf. Open right hand margins might make it marginally better.

Other half the reason I like it: Whenever a society runs its vehicles faster than 15 miles an hour, the distribution of power gets loopy, and the culture goes BANANAS.

—Jim Harding

Energy and Equity
Ivan Illich
1974; 84pp.
$0.95 postpaid
from:
Harper & Row General Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Beyond a certain speed, motorized vehicles create new distances that they alone can shrink; they create them for all, but they can shrink them only for a few.

•

It has recently become fashionable to insist on an impending energy crisis. This euphemistic term conceals a contradiction and consecrates an illusion. It masks the contradiction implicit in the joint pursuit of equity and industrial growth. It safeguards the illusion that machine power can indefinitely take the place of manpower. To face this contradiction and betray this illusion, it is urgent to clarify the reality that the language of crisis obscures: high quanta of energy degrade social relations just as inevitably as they destroy the physical milieu.

•

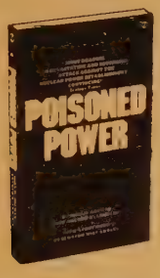
The typical American male devotes more than 1,600 hours a year to his car. He sits in it while it goes and while it stands idling. He parks it and searches for it. He earns the money to put down on it and to meet the monthly instalments. He works to pay for petrol, tolls, insurance, taxes and tickets. He spends four of his sixteen waking hours on the road or gathering his resources for it. And this figure does not take into account the time consumed by other activities dictated by transport: time spent in hospitals, traffic courts and garages; time spent watching automobile commercials or attending consumer education meetings to improve the quality of the next buy. The model American puts in 1,600 hours to get 7,500 miles: less than five miles per hour. In countries deprived of a transportation industry, people manage to do the same, walking wherever they want to go, and they allocate only three to eight per cent of their society's time budget to traffic instead of 28 per cent. What distinguishes the traffic in rich countries from the traffic in poor countries is not more mileage per hour of life-time for the majority, but more hours of compulsory consumption of high doses of energy, packaged and unequally distributed by the transportation industry.

Poisoned Power

"Atoms for Peace" was primarily motivated by social guilt over Hiroshima, and that was nuclear power's last connection with any real human need. In national terms it is the hard stuff—— opiate of governments and avenue these days for instant Big Power (bomb) status. Speed kills.

Poisoned Power, *by two biophysicists (their previous nuclear book is on Pg.* 28*) spells out better than anyone the appalling details of the nuclear bad idea. Radiation is not your friend. Turn over the AEC to NASA, I say, and work on space drive applications, or forget it.*

—SB



Poisoned Power
John W. Gofman &
Arthur R. Tamplin
1971; 277pp.
$1.95 postpaid
from:
Signet Books
New American Library
1301 Avenue of the Americas
New York, NY 10019
or Whole Earth

The sad history of the Fermi plant is now well known to everyone. After an outlay of 120 million dollars this ill-starred atomic boondoggle failed on October 5, 1966, in its early stage of operation. A period followed where no one involved knew whether the entire city of Detroit would have to be evacuated. We were lucky that such a secondary disaster did not follow the failure of the Fermi reactor. We emphasize the word "lucky," and no one has expressed this better than Professor Edward Teller, who, by the way, is a fervent *proponent* of nuclear energy.

"... So far, we have been extremely lucky.... But with the spread of industrialization, with the greater number of simians monkeying around with things they do not completely understand, sooner or later a fool will prove greater than the proof even in a foolproof system."

•

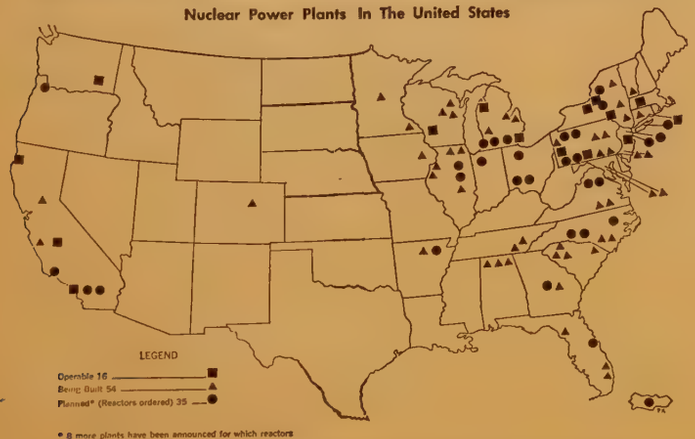
Radioactivity represents one of the worst, maybe the worst of all poisons. And it is manufactured in astronomical quantities as an inevitable by-product of nuclear electricity generation. One year of operation of a single, large nuclear power plant, generates as much of long-persisting radioactive poisons as *one thousand* Hiroshima-type atomic bombs. There is no way the electric power can be generated in nuclear plants without generating the radioactive poisons. Once any of these radioactive poisons are released to the environment, and this we believe is likely to occur, the pollution of our environment is irreversible. They will be with us for centuries. It is important that people learn *how* they are likely to be exposed to such poisons and *how* death-dealing injury is thereby produced in the individual and in all future generations.

•

There are several prerequisites:

(1) Abolition of "experts" or "standard-setters" as decision makers.
(2) Honest presentations of the hazards of by-product poisons.
(3) Honest presentations of the benefits of proposed technologies, including serious consideration of alternative methods of achieving the benefits.
(4) Open-forum debate, followed by decision either by public vote or vote of *public* representatives.
(5) Preservation of the option to reverse decisions. New information concerning hazards and benefits must always be anticipated. Society must preserve the option to change its choice of technologies in the light of new evidence.
(6) Recognition of the principle that the appropriate permissible dose of a man-made poison is *zero*. Deviations from zero allowable pollution must be allowed only by public decision to be polluted in exchange for some benefit it chooses to receive.
(7) Recognition that the burden of proof is upon the technology to prove safety, rather than for the public to prove hazard.

Nuclear Power Plants In The United States



World Energy Strategies

From the redoubtable Amory Lovins comes word that "Project Independence" (energy self-sufficiency for the U.S. by 1985) is out of the question—— it would cost $800 billion over 15 years and net very little. Read all about it in Lovins' **World Energy Strategies** *(suggested to us by Jim Harding), available Fall 1974, 128 pp, $4.95 postpaid from:*

Friends of the Earth
525 Commercial St.
San Francisco, CA
94111
or Whole Earth

Where Energy Saving Counts

It says here in our copy of **The Potential for Energy Conservation** *(1972; $3 from U.S. Govt. Printing Office, Washington DC 20402):*

The most significant realizable measures to effect conservation are: a) improved insulation in homes, b) adoption of more efficient air conditioning systems, c) shift to intercity freight from highway to rail, intercity passengers from air to ground travel and urban passengers from automobiles to mass transit and freight consolidation in urban freight movement and, d) introduction of more efficient industrial processes and equipment.

Energy does not explain

As an explanatory principle in the field of biology, energy rates a little better than money, but very little. And unless everything is filtered through information theory and information theory itself firmly grounded in circuits, most of what can be said is mush, and 30% of it is pathogenic. (Or is all mush pathogenic?)

Yours,
Gregory Bateson

ENERGY ECOLOGY & ECONOMIC$

BY HOWARD T. ODUM

Here, in full, is the hottest paper of '74, with, for its vast xerox-copy readership who have been wondering what the diagrams looked like, faithful reproductions of Odum's illustrations. (The paper was sent to us by John Todd and Mark Musick.)

No one else has shown so clearly the consequences of industrial technology entering an era of diminishing returns in energy collection and use. There is no light at the end of the energy tunnel. Only a wall.

Howard T. Odum is the author of **Environment, Power and Society** *(Pg. 8) and possibly the adeptest (and darkest) predictor around. In our view his conceptual approach is about one whole level more sophisticated than what's in* **The Limits to Growth**. *Appended to the article is Odum's notes for a press conference held January 14, 1974 (sent to us by Tom Bender). Professor Odum teaches Energetics at the University of Florida (Dept. of Environmental Engineering Sciences, University of Florida, Gainesville FL 32601).*

–SB

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As long-predicted energy shortages appear, as questions about the interaction of energy and environment are raised in legislatures and parliaments, and as energy-related inflation dominates public concern, many are beginning to see that there is a unity of the single system of energy, ecology, and economics. The world's leadership, however, is mainly advised by specialists who study only a part of the system at a time.

Instead of a single system's understanding, we have adversary arguments dangerous to the welfare of nations and the role of man as the earth's information bearer and programmatic custodian. Many economic models ignore the changing force of energy regarding effects of energy sources as an external constant; ecoactivists cause governments to waste energy in unnecessary technology; and the false gods of growth and medical ethics make famine, disease, and catalytic collapse more and more likely for much of the world. Some energy specialists consider the environment as an antagonist instead of a major energy ally in supporting the biosphere.

Instead of the confusion that comes from the western civilization's characteristic educational approach of isolating variables in tunnel-vision thinking, let us here seek common sense overview which comes from overall energetics. Very simple overall energy diagrams clarify issues quantitatively, indicating what is possible. The diagrams and symbols are explained further in a recent book (1).

For example, Figure 1 shows the basis of production in interaction of fuel reserves, steady energies of solar origin and feedback of work from the system's structure. Figure 1 is the computer simulation of this model for our existence, showing a steady state after our current growing period. As the fuel tank is drained, we return to a lower solar base of simpler agriculture. Simple macroscopic minimodels based on overview of world energy provides the same kind of trend curves as the detailed models of Forrester and Meadows (see Ref 2). With major changes confronting us, let us consider here some of the main points that we must comprehend so we may be prepared for the future.

Figure 1 A. Generalized world model of man and nature based on one-shot fossil fuel usages and steady solar work. Pathways are flows of energy from outside source (circle) through interactions (pointed blocks marked 'X' to show multiplier action) to final dispersion of dispersed heat. The tank symbol refers to storage. Here world fuel reserve storage helps build a storage of structure of man's buildings, information, population, and culture.

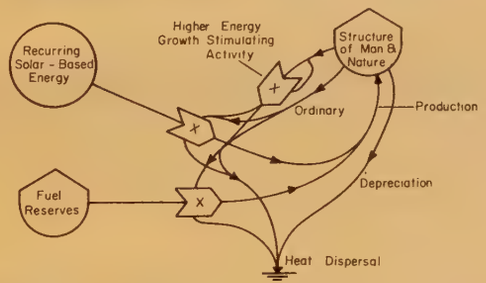


Figure 1 B. Graphs resulting from simulation of the model in Figure 1 A. Available world fuel reserve was taken as 5×10^{19} kilocalories and energy converted from the solar input and converged into man's productive system of growth and maintenance was 5×10^{16} kilocalories when structure was 10^{18} kilocalories. Peak of structural growth was variable over a 50-year period depending on amounts diverted into waste pathways.

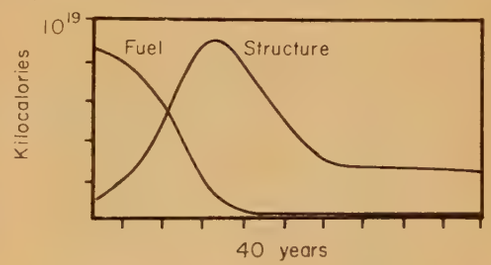
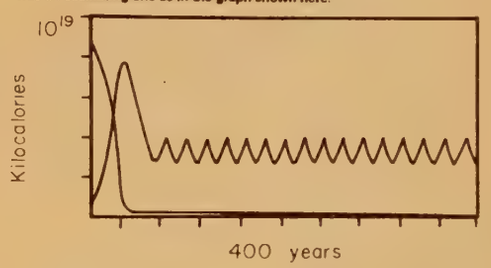


Figure 1 C. The steady state observed in some simulations of Figure 1 A was an oscillating one as in the graph shown here.



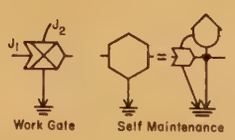
References and Notes:

1. H T Odum, *Environment Power and Society* (John Wiley) 336pp.
2. D H Meadows, D L Meadows, J Randy and W W Behrens Behrens III, *The Limits to Growth* (Universe Books, New York, 1972).
3. A J Lotka, *Contribution to the energetics of evolution* in Proceedings of the National Academy of Sciences 8, 147-188 (1922).

4. I am grateful for stimulation and collaboration of many in our common effort including especially C Kylstra, Pong Lem, and our keen graduate student group in the United States, and Jan Zeilon and Bengt-Owe Jansson in Sweden. Simulation work was supported by the U S Atomic Energy Commission on Contract At-(40-10-4398).

5. Energy systems symbols used for showing mathematical and energetic relationships between the parts of our system of energy, enonomics and ecology.

All outside energy sources flow in from sources indicated with the circular symbol and these sources deliver causal forcing actions. All storages of energy, structure, money, information, value, *etc* are represented by the tank shaped symbol and these tanks are called state variables. All energies leave systems as dispersed heat that has no more potential for doing useful work. In the diagrams the dispersal of unusable heat energy is called a heat sink.



When two different kinds of flows of energy (or materials, information, or services that carry energy) interact in processes where both are necessary, we draw a work gate symbol. The system has an X if the action of one flow so facilitates the flow of the other and vice versa so that the process is a multiplier action. As in all processes, useful energy that drives the processes emerges as degraded, no longer reusable dispersed energy leaving the earth through the heat sink. (Heat on earth ultimately is reradiated out to space from the top of the atmosphere.)

Self maintaining entities such as populations, cities, industries, and other organizations that feed energy from storage back into multiplicative pumping actions are shown with the hexagonal symbol. The energy dispersed in maintaining the system, its growth, and its work services is shown passing out the bottom in a heat sink.

When new storages are developed, energy laws require that much of the energy be dispersed into unusable heat in order to make the process of storing go fast enough to be most competitive. The symbol for potential generating work shows the necessary heat dispersal that is required for any storing process.

When two energy flows may be substituted for each other, we show their junction as the convergence of lines. This means that the flows add (in contrast to the work gate where other kinds of interactions are the result).

Because money flows as a countercurrent to the flow of energy, goods, and services (the latter two also carrying energy), we represent pathways that involve economic transactions with the diamond shape symbol and two counter diagrams pathways. The energy cost of doing economic business is shown as the energy lost into the heat sink.

The diagrams may be examined as if they were a series of water tanks and pipes with water flowing between the tanks, being driven by the pressures of the storages or outside pressures and the energy of the water pressure ultimately leaving the system in the various frictional heat dispersions. The diagrams can thus be visualized to help see the complexity of systems and recognize just from the configurations what kinds of responses might follow proposed manipulations. As further given in (1) the diagrams are also ways of writing mathematical differential equations for making precise mathematical descriptions of relationships.

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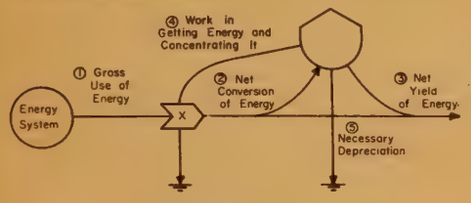
1. THE TRUE VALUE OF ENERGY TO SOCIETY IS THE NET ENERGY, WHICH IS THAT AFTER THE ENERGY COSTS OF GETTING AND CONCENTRATING THAT ENERGY ARE SUBTRACTED.

Many forms of energy are low grade because they have to be concentrated, transported, dug from deep in the earth or pumped from far at sea. Much energy has to be used directly and indirectly to support the machinery, people, supply systems, etc to deliver the energy. If it takes ten units of energy to bring ten units of energy to the point of use, then there is no net energy. Right now we dig further and further, deeper and deeper, and go for energies that are more and more dilute in the rocks. Sunlight is also a dilute energy that requires work to harness.

Figure 2. Energy flow diagram illustrating energy laws, and the difference between net and gross energy flows.

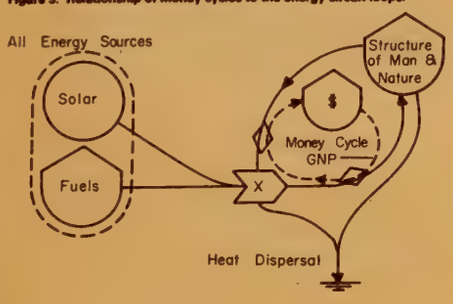


We are still expanding our rate of consumption of gross energy, but since we are feeding a higher and higher percentage back into the energy seeking process, we are decreasing our percentage of net energy production. Many of our proposed alternative energy sources take more energy feedback than present processes. Figure 2 shows net energy emerging beyond the work and structural maintenance costs of energy processing.

2. WORLDWIDE INFLATION IS DRIVEN IN PART BY THE INCREASING FRACTION OF OUR FOSSIL FUELS THAT HAVE TO BE USED IN GETTING MORE FOSSIL AND OTHER FUELS.

If the money circulating is the same or increasing, and if the quality energy reaching society for its general work is less because so much energy has to go immediately into the energy-getting process, then the real work to society per unit money circulated is less. Money buys less real work of other types and thus money is worth less. Because the economy and total energy utilization are still expanding, we are misled to think the total value is expanding and we allow more money to circulate which makes the money-to-work ratio even larger. Figure 3 shows the circulation of money that constitutes the GNP in a counter-current to the energy flow.

Figure 3. Relationship of money cycles to the energy circuit loops.



3. MANY CALCULATIONS OF ENERGY RESERVES WHICH ARE SUPPOSED TO OFFER YEARS OF SUPPLY ARE AS GROSS ENERGY RATHER THAN NET ENERGY AND THUS MAY BE OF MUCH SHORTER DURATION THAN OFTEN STATED.

Suppose for every ten units of some quality of oil shale proposed as an energy source there were required nine units of energy to mine, process, concentrate, transport, and meet environmental requirements. Such a reserve would deliver 1/10 as much net energy and last 1/10 as long as was calculated. Leaders should demand of our estimators of energy reserves that they make their energy calculations in units of net energy. The net reserves of fossil fuels are mainly unknown but they are much smaller than the gross reserves which have been the basis of public discussions and decisions that imply that growth can continue.

4. SOCIETIES COMPETE FOR ECONOMIC SURVIVAL BY LOTKA'S PRINCIPLE (3), WHICH SAYS THAT SYSTEMS WIN AND DOMINATE THAT MAXIMIZE THEIR USEFUL TOTAL POWER FROM ALL SOURCES AND FLEXIBLY DISTRIBUTE THIS POWER TOWARD NEEDS AFFECTING SURVIVAL.

The programs of forests, seas, cities, and countries survive that maximize their system's power for useful purposes. The first requirement is that opportunities to gain inflowing power be maximized, and the second requirement is that energy utilization be effective and not wasteful as compared to competitors or alternatives. For further discussion see Lotka (3) and Odum (1).

5. DURING TIMES WHEN THERE ARE OPPORTUNITIES TO EXPAND ONE'S POWER INFLOWS, THE SURVIVAL PREMIUM BY LOTKA'S PRINCIPLE IS ON RAPID GROWTH EVEN THOUGH THERE MAY BE WASTE.

We observe dog-eat-dog growth competition every time a new vegetation colonizes a bare field where the immediate survival premium is first placed on rapid expansion to cover the available energy receiving surfaces. The early growth ecosystems put out weeds of poor structure and quality, which are wasteful in their energy-capturing efficiencies, but effective in getting growth even though the structures are not long lasting. Most recently, modern communities of man have experienced two hundred years of colonizing growth, expanding to new energy sources such as fossil fuels, new agricultural lands, and other special energy sources. Western culture, and more recently, Eastern and Third World cultures, are locked into a mode of belief in growth as necessary to survival. "Grow or perish" is what Lotka's principle requires, but only during periods when there are energy sources that are not yet tapped. Figure 3 shows the structure that must be built in order to be competitive in processing energy.

6. DURING TIMES WHEN ENERGY FLOWS HAVE BEEN TAPPED AND THERE ARE NO NEW SOURCES, LOTKA'S PRINCIPLE REQUIRES THAT THOSE SYSTEMS WIN THAT DO NOT ATTEMPT FRUITLESS GROWTH BUT INSTEAD USE ALL AVAILABLE ENERGIES IN LONG-STAYING, HIGH DIVERSITY, STEADY STATE WORKS.

Whenever an ecosystem reaches its steady state after periods of succession, the rapid net growth specialists are replaced by a new team of higher diversity, higher quality, longer living, better controlled, and stable components. Collectively, through division of labor and specialization, the climax team gets more energy out of the steady flow of available source energy than those specialized in fast growth could.

Our system of man and nature will soon be shifting from rapid growth as the criterion of economic survival to steady state non-growth as the criterion of maximizing one's work for economic survival (Figure 1). The timing depends only on the reality of one or two possibly high-yielding nuclear energy processes (fusion and breeder reactions) which may or may not be very yielding.

Ecologists are familiar with both growth states and steady state, and observe both in natural systems in their work routinely, but economists were all trained in their subject during rapid growth and most don't even know there is such a thing as steady state. Most economic advisors have never seen a steady state even though most of man's million year history was close to steady state. Only the last two centuries have seen a burst of temporary growth because of temporary use of special energy supplies that accumulated over long periods of geologic time.

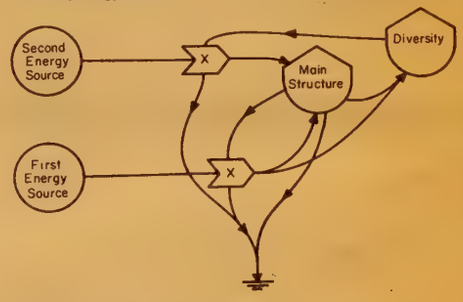
7. HIGH QUALITY OF LIFE FOR HUMANS AND EQUITABLE ECONOMIC DISTRIBUTION ARE MORE CLOSELY APPROXIMATED IN STEADY STATE THAN IN GROWTH PERIODS.

During growth, emphasis is on competition, and large differences in economic and energetic welfare develop; competitive exclusion, instability, poverty, and unequal wealth are characteristic. During steady state, competition is controlled and eliminated, being replaced with regulatory systems, high division and diversity of labor, uniform energy distributions, little change, and growth only for replacement purposes. Love of stable system quality replaces love of net gain. Religious ethics adopt something closer to that of those primitive peoples that were formerly dominant in zones of the world with cultures based on the steady energy flows from the sun. Socialistic ideals about distribution are more consistent with steady state than growth.

8. THE SUCCESSFULLY COMPETING ECONOMY MUST USE ITS NET OUTPUT OF RICHER QUALITY ENERGY FLOWS TO SUBSIDIZE THE POORER QUALITY ENERGY FLOW SO THAT THE TOTAL POWER IS MAXIMIZED.

In ecosystems, diversity of species develop that allow more of the energies to be tapped. Many of the species that are specialists in getting lesser and residual energies receive subsidies from the richer components. For example, the sun leaves on top of

Figure 4. Relationship of general structural maintenance to diversity and secondary energy sources.



trees transport fuels that help the shaded leaves so they can get some additional energy from the last rays of dim light reaching the forest floor. The system that uses its excess energies in getting a little more energy, even from sources that would not be net yielding alone, develops more total work and more resources for total survival. In similar ways, we now use our rich fossil fuels to keep all kinds of goods and services of our economy cheap so that the marginal kinds of energies may receive the subsidy benefit that makes them yielders, whereas they would not be able to generate much without the subsidy. Figure 4 shows the role of diversity in tapping auxiliary energies and maintaining flexibility to changing sources.

9. ENERGY SOURCES WHICH ARE NOW MARGINAL, BEING SUPPORTED BY HIDDEN SUBSIDIES BASED ON FOSSIL FUEL, BECOME LESS ECONOMIC WHEN THE HIDDEN SUBSIDY IS REMOVED.

A corollary of the previous principle of using rich energies to subsidize marginal ones is that the

marginal energy sources will not be as net yielding later, since there will be no subsidy. This truth is often stated backwards in economists' concepts because there is inadequate recognition of external changes in energy quality. Often they propose that marginal energy sources will be economic later when the rich sources are gone. An energy source is not a source unless it is contributing yields, and ability of marginal sources to yield goes down as the other sources of subsidy become poorer. Figure 4 shows these relationships.

10. INCREASING ENERGY EFFICIENCY WITH NEW TECHNOLOGY IS NOT AN ENERGY SOLUTION, SINCE MOST TECHNOLOGICAL INNOVATIONS ARE REALLY DIVERSIONS OF CHEAP ENERGY INTO HIDDEN SUBSIDIES IN THE FORM OF FANCY, ENERGY-EXPENSIVE STRUCTURES.

Non-diagram illustrations by Russ Youngreen.

Most of our century of progress with increasing efficiencies of engines has really been spent developing mechanisms to subsidize a process with a second energy source. Many calculations of efficiency omit these energy inputs. We build better engines by putting more energy into the complex factories for manufacturing the equipment. The percentage of energy yield in terms of all the energies incoming may be less not greater. Making energy net yielding is the only process not amenable to high energy-based technology.

11. EVEN IN URBAN AREAS MORE THAN HALF OF THE USEFUL WORK ON WHICH OUR SOCIETY IS BASED COMES FROM THE NATURAL FLOWS OF SUN, WIND, WATERS, WAVES, *ETC* THAT ACT THROUGH THE BROAD AREAS OF SEAS AND LANDSCAPES WITHOUT MONEY PAYMENT. AN ECONOMY, TO COMPETE AND SURVIVE, MUST MAXIMIZE ITS USE OF THESE ENERGIES, NOT DESTROYING THEIR ENORMOUS FREE SUBSIDIES. THE NECESSITY OF ENVIRONMENTAL INPUTS IS OFTEN NOT REALIZED UNTIL THEY ARE DISPLACED.

When an area first grows, it may add some new energy sources in fuels and electric power, but when it gets to about 50 percent of the area developed it begins to destroy and diminish as much necessary life support work that was free and unnoticed as it adds. At this point, further growth may produce a poor ability in economic competition because the area now has higher energy drains. For example, areas that grow too dense with urban developments may pave over the areas that formerly accepted and reprocessed waste waters. As a consequence, special tertiary waste treatments become necessary and monetary and energy drains are diverted from useful works to works that were formerly supplied free.

12. ENVIRONMENTAL TECHNOLOGY WHICH DUPLICATES THE WORK AVAILABLE FROM THE ECOLOGICAL SECTOR IS AN ECONOMIC HANDICAP.

As growth of urban areas has become concentrated, much of our energies and research and development work has been going into developing energy-costing technology to protect the environment from wastes, whereas most wastes are themselves rich energy sources for which there are, in most cases, ecosystems capable of using and recycling wastes as a partner of the city without drain on the scarce fossil fuels.

Soils take up carbon monoxide, forests absorb nutrients, swamps accept and regulate floodwaters. If growth is so dense that environmental technology is required, then it is too dense to be economically vital for the combined system of man and nature there. The growth needs to be arrested or it will arrest itself with depressed, poorly competing economy of man and of his environs. For example, there is rarely excuse for tertiary treatment because there is no excuse for such dense packing of growth that the natural buffer lands cannot be a good cheap recycling partner. Man as a partner of nature must use nature well and this does not mean crowd it out and pave it over; nor does it mean developing industries that compete with nature for the waters and wastes that would be an energy contributor to the survival of both.

13. SOLAR ENERGY IS VERY DILUTE AND THE INHERENT ENERGY COST OF CONCENTRATING SOLAR ENERGY INTO FORM FOR HUMAN USE HAS ALREADY BEEN MAXIMIZED BY FORESTS AND FOOD PRODUCING PLANTS. WITHOUT ENERGY SUBSIDY THERE IS NO YIELD FROM THE SUN POSSIBLE BEYOND THE FAMILIAR YIELDS FROM FORESTRY AND AGRICULTURE.

Advocates of major new energies available from the sun don't understand that the concentrations quality of solar energy is very low, being only 10^{-16} kilocalories per cubic centimeter. Much of this has to be used up in upgrading to food quality. Plants build tiny microscopic semiconductor photon receptors that are the same in principle as the solar cells advocated at vastly greater expense by some solar advocates. The plants have already maximized use of sunlight, by which they support an ecosystem whose diverse work helps maximize this conversion as shown in Figure 5A. If man and his work are

Figure 5. Diagrams of three systems of solar energy use.

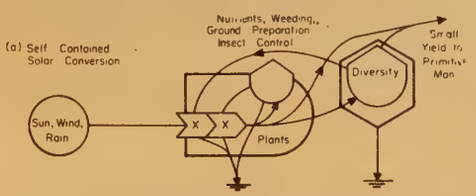


Figure 5 A. Man a minor part of the complex forest ecosystem.

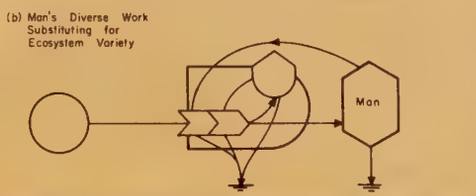


Figure 5 B. Man a major partner in an agricultural system on light alone.

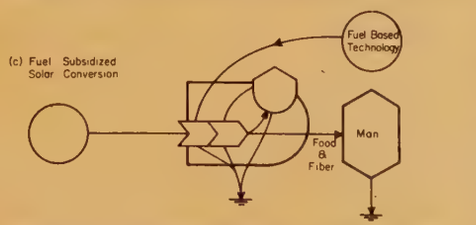
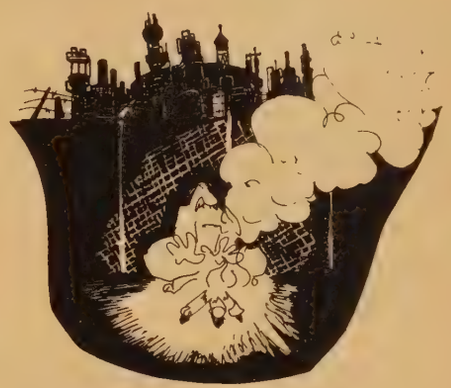


Figure 5 C. Fossil fuel subsidized agriculture as a colonial member of a technological society of man with maximum possible solar conversion.

substituted for much of the ecosystem so that he and his farm animals do the recycling and management, higher yield results as in sacred cow agriculture (Figure 5B). Higher yields require large fossil fuel subsidies in doing some of the work. For example, making the solar receiving structures (Figure 5C), whereas the plants and ecosystem make their equipment out of the energy budget they process. Since man has already learned how to subsidize agriculture and forestry with fossil fuels when he has them, solar technology becomes a duplication. The reason major solar technology has not and will not be a major contributor of substitute for fossil fuels is that it will not compete without energy subsidy from the fossil fuel economy. Some energy savings are possible in house heating on a minor scale.

14. ENERGY IS MEASURED BY CALORIES, BTU'S, KILOWATT HOURS, AND OTHER INTRACONVERTIBLE UNITS, BUT ENERGY HAS A SCALE OF QUALITY WHICH IS NOT INDICATED BY THESE MEASURES. THE ABILITY TO DO WORK FOR MAN DEPENDS ON THE ENERGY QUALITY AND QUANTITY, AND THIS IS MEASUREABLE BY THE AMOUNT OF ENERGY OF A LOWER QUALITY GRADE REQUIRED TO DEVELOP THE HIGHER GRADE. THE SCALE OF ENERGY GOES FROM DILUTE SUNLIGHT UP TO PLANT MATTER TO COAL, FROM COAL TO OIL TO ELECTRICITY AND UP TO THE HIGH QUALITY EFFORTS OF COMPUTER AND HUMAN INFORMATION PROCESSING.



15. NUCLEAR ENERGY IS NOW MAINLY SUBSIDIZED WITH FOSSIL FUELS AND BARELY YIELDS NET ENERGY.

High costs of mining, processing fuels, developing costly plants, storing wastes, operating complex safety systems, and operating government agencies make present nuclear energy one of the marginal sources which add some energy now, while they are subsidized by a rich economy. A self-contained, isloated nuclear energy does not now exist. Since the present nuclear energy is marginal while it uses the cream of rich fuels accumulated during times of rich fossil fuel excess, and because the present rich reserves of nuclear fuel will last no longer than fossil fuels, there may not be a major long-range effect of present nuclear technology on economic survival. High energy cost of nuclear construction may be a factor accelerating the exhaustion of the richer fuels. Figure 4 illustrates the principle.
Breeder Process: The Breeder Process is now being given its first tests of economic effectiveness and we don't yet know how *net* yielding it will be. The present nuclear plants are using up the rich fuels that could support the breeder reactors if these turn out to be net yielders over and beyond the expected high energy costs in safety costs, occasional accidents, reprocessing plants, *etc.* Should we use the last of our rich fossil fuel wealth for the high research and development costs and high capital investments of processes too late to develop a net yield?
Fusion: The big question is will fusion be a major net yield? The feasibility of pilot plants with the fusion process is unknown. There is no knowledge yet as to the net energy in fusion or the amounts of energy subsidy fusion may require. Because of this uncertainty, we cannot be sure about the otherwise sure-leveling and decline in total energy flows that may soon be the pattern for our world.

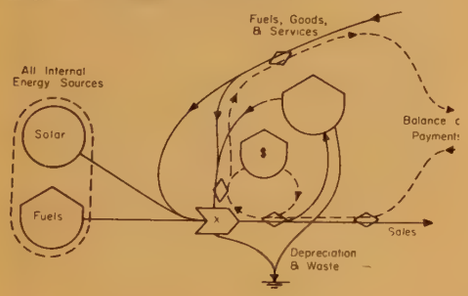
16. SUBSTANTIAL ENERGY STORAGES ARE REQUIRED FOR STABILITY OF AN ECONOMY AGAINST FLUCTUATIONS OF ECONOMIES, OR OF NATURAL CAUSES, AND OF MILITARY THREATS.

The frantic rush to use the last of the rich oils and gas that are easy to harvest for a little more growth and tourism is not the way to maintain power stability or political and military security for the world community of nations as a whole. World stability requires a de-energizing of capabilities of vast war, and an evenly distributed power base for regular defense establishments, which need to be evenly balanced without great power gradients that encourage change of military boundaries. A two-year storage is required for stability of a component.

17. THE TOTAL TENDENCY FOR NET FAVORABLE BALANCE OF PAYMENTS OF A COUNTRY RELATIVE TO OTHERS DEPENDS ON THE RELATIVE NET ENERGY OF THAT COUNTRY INCLUDING ITS NATURAL AND FUEL-BASED ENERGIES MINUS ITS WASTES AND NONPRODUCTIVE ENERGY USES.

Countries with their own rich energies can export goods and services with less requirement for money than those that have to use their money to buy their fuels. Those countries with inferior energy flows into useful work become subordinate energy dependents to other countries. A country that sells oil but does not use it within its boundaries to develop useful work is equally subordinate since a major flow of necessary high quality energy in the form of technical goods and services is external in this case. The country with the strongest position is the one with a combination of internal sources of rich energies and internal sources of developed structure and information based on the energy. The relations of energy sources to payment balances are given in Figure 6.

Figure 6 A. Diagram showing how energy sources and energy loss pathways affect the balance of payments and general economic competition position of a single country. Better balance results when one's own energy sources are better, and one's waste less.



18. DURING PERIODS OF EXPANDING ENERGY AVAILABILITIES, MANY KINDS OF GROWTH-PRIMING ACTIVITIES MAY FAVOR ECONOMIC VITALITY AND THE ECONOMY'S ABILITY TO COMPETE. INSTITUTIONS, CUSTOMS, AND ECONOMIC POLICIES AID BY ACCELERATING ENERGY CONSUMPTION IN AN AUTOCATALYTIC WAY.

Many pump priming properties of fast growing economies have been naturally selected and remain in procedures of government and culture. Urban concentrations, high use of cars, economic subsidy to growth, oil depletion allowances, subsidies to population growth, advertising, high-rise building, *etc* are costly in energy for their operation and maintenance, but favor economic vitality as long as their role as pump primers is successful in increasing the flow of energy over and beyond their special cost. Intensely concentrated densities of power use have been economic in the past because their activities have accelerated the system's growth during a period when there were new energy sources to encompass.

19. DURING PERIODS WHEN EXPANSION OF ENERGY SOURCES IS NOT POSSIBLE, THEN THE MANY HIGH DENSITY AND GROWTH PROMOTING POLICIES AND STRUCTURES BECOME AN ENERGY LIABILITY BECAUSE THEIR HIGH ENERGY COST IS NO LONGER ACCELERATING ENERGY YIELD.

The pattern of urban concentration and the policies of economic growth stimulation that were necessary and successful in energy growth competition periods are soon to shift. There will be a premium against the use of pump priming characteristics since there will be no more unpumped energy to prime. What did work before will no longer work and the opposite becomes the pattern that is economically successful. All this makes sense and is commonplace to those who study various kinds of ecosystems, but the economic advisors will be sorely pressed and lose some confidence until they learn about the steady state and its criteria for economic success. Countries with great costly investments in concentrated economic activity, excessive transportation customs, and subsidies to industrial expansion will have severe stresses. Even now the countries who have not gone so far in rapid successional growth are setting out to do so at the very time when their former more steady state culture is about to begin to become a more favored economic state comparatively.

20. SYSTEMS IN NATURE ARE KNOWN THAT SHIFT FROM FAST GROWTH TO STEADY STATE GRADUALLY WITH PROGRAMMATIC SUBSTITUTION, BUT OTHER INSTANCES ARE KNOWN IN WHICH THE SHIFT IS MARKED BY TOTAL CRASH AND DESTRUCTION OF THE GROWTH SYSTEM BEFORE THE EMERGENCE OF THE SUCCEEDING STEADY STATE REGIME.

Because energies and monies for research, development, and thinking are abundant only during growth and not during energy leveling or decline, there is a great danger that means for developing the steady state will not be ready when they are needed, which may be no more than 5 years away but probably more like 20 years. (If fusion energy is a large net energy yielder, there may be a later growth period when the intensity of human power development begins to affect and reduce the main life support systems of the oceans, atmospheres, and general biosphere.)

The humanitarian customs of the earth's countries now in regard to medical aid, famine, and epidemic are such that no country is allowed to develop major food and other critical energy shortage because the others rush in their reserves. This practice had insured that no country will starve in a major way until we all starve together when the reserves are no longer there.

Chronic disease was evolved with man as his regulator, being normally as a device for infant mortality and merciful old age death. It provided on the average an impersonal and accurate energy testing of body vitalities, adjusting the survival rate to the energy resources. Even in the modern period of high energy medical miracles, the energy for total medical care systems is a function of the total country's energies, and as energies per capita fall again so will the energy for medicine per capita, and the role of disease will again develop its larger role in the population regulation system. Chronic disease at its best was and is a very energy-inexpensive regulator.

Epidemic disease is something else. Nature's systems normally use the principle of diversity to eliminate epidemics. *Vice versa,* epidemic disease is nature's device to eliminate monoculture, which may be inherently unstable. Man is presently allowed the special high yields of various monocultures including his own high density population, his paper source in pine trees, and his miracle rice only so long as he has special energies to protect these artificial ways and substitute them for disease which would restore the high diversity system, ultimately the more stable flow of energy.

The terrible possibility that is before us is that there will be the continued insistence on growth with our last energies by the economic advisors that don't understand, so that there are no reserves with which to make a change, to hold order, and to cushion a period when populations must drop. Disease reduction of man and of his plant production systems could be planetary and sudden if the ratio of population to food and medical systems is pushed to the maximum at a time of falling net energy. At some point the great gaunt towers of nuclear energy installations, oil drilling, and urban cluster will stand empty in the wind for lack of enough fuel technology to keep them running. A new cycle of

dinosaurs will have passed its way. Man will survive as he reprograms readily to that which the ecosystem needs of him so long as he does not forget who is serving who. What is done well for the ecosystem is good for man. However, the cultures that say only what is good for man is good for nature may pass and be forgotten like the rest.

There was a famous theory in paleoecology called orthogenesis which suggested that some of the great animals of the past were part of systems that were locked into evolutionary mechanisms by which the larger ones took over from smaller ones. The mechanisms then became so fixed that they carried the size trend beyond the point of survival, whereupon the species went extinct. Perhaps this is the main question of ecology, economics, and energy. Has the human system frozen its direction into an orthogenetic path toward cultural crash, or is the great creative activity of the current energy-rich world already sensing the need for change? Are alternatives already being tested by our youth so they will be ready for the gradual transition to a fine steady state that carries the best of our recent cultural evolution into new, more miniaturized, more dilute, and more delicate ways of man-nature?

In looking ahead, the United States and some other countries may be lucky to be forced by changing energy availabilities to examine themselves, level their growth, and change their culture towards the steady state early enough so as to be ready with some tested designs before the world as a whole is forced to this. A most fearful sight is the behavior of Germany and Japan who have little native energies and rush crazily into boom and bust economy on temporary and borrowed pipelines and tankers, throwing out what was stable and safe to become rich for a short period; monkey see, monkey do. Consider also Sweden that once before boomed and busted in its age of Baltic Ships while cutting its virgin timber. Later it was completely stable on water power and agriculture, but now after a few years of growth became like the rest, another bunch of engines on another set of oil flows, a culture that may not be long for this world.

What is the general answer? Eject economic expansionism, stop growth, use available energies for cultural conversion to steady state, seek out the condition now that will come anyway, but by our service be our biosphere's handmaiden anew.

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The excellent special issue of **Ambio** *on energy in which this article appeared, costs $4 from Universitesforlaget, Box 307, Blindern, Oslo 3, Norway.*

Notes for Press Conference
January 14, 1974

MORE PERSPECTIVES ON WORLD ENERGY RELATIONSHIPS

Howard T. Odum
Environmental Engineering Sciences
and
Center for Wetlands

Twenty points about the current world energy situation are made in this article using simple models to show some fallacies in many proposed responses to energy needs. Additional points follow:

1. U.S. POLICY RELATIVE TO OTHER COUNTRIES IS DANGEROUS TO ITS SURVIVAL AS AN INDEPENDENT ENTITY.

The countries that hold back their richer fuel reserves while others are spending their last reserves end up with more relative power in military and economic affairs. The recent actions to use our reserves of fuel and other energy costing and amplifying strategic reserves for business as usual is bordering on treasonous and yet was adopted by an ignorant Congress.

Rich energies get more energies if they are used in amplifier actions (example: machinery for using other resources). As rich fuels get scarce they become more and more limiting in such activities and their energy amplifier effect gets larger. Thus, the countries that save energy until later get more energy out of secondary amplifier actions. One should not spend our reserves now.

Fuels don't actually run out except where price fixing is attempted, since holding prices down causes oils to go elsewhere for sale. Money costs rise as energy cost of getting energy rises since a higher percentage of the human economy gets involved in energy getting. The long range energy effect is the diversion of many current aspects of our so called standard of living back to energy collection and concentration work.

Those that advocate use of current remaining reserves in order to be internationally independent are thinking backwards. In the first place, if one uses up one's own reserves rather than those available to economic and military competitors one makes his last situation worse. If you go far enough at this, you will ultimately become a colony invaded either economically or militarily. To maintain independence, keep reserves as a storage to help control prices and prevent attack and use up everyone elses fuels first, even if one has to pay more and take a temporary cut in living standard. In the second place, using one's own oil reserves causes one to get to low grade oils spending more and more of one's economy on getting energy, lowering one's balance of payments and standard of living anyway.

2. PRESENT U.S. POLICY HAS SOME WAR RISKS.

Large war may be prevented if all potential combatants have a realistic understanding of their energy condition so that they will truly know what the outcome would be if a war was conducted at a particular boundary, considering its distance from respective power centers.

If the boundary between two competing power centers is located appropriate to the energy sources available to the defense, and both sides understand their strength, then large war may be prevented. If, however, there are shifts in relative energy and the boundary is not shifted, a situation is set up where the system with lesser energy can be defeated and driven well back from its former position. The U.S. is now in that role relative to its position in the 1940's since it has 1/3 or less of the world's energy expenditure whereas it used to have half. There is a great danger that the U.S. might attempt to exert military action in the eastern Mediterranean as it once did in Eisenhower times with inadequate power to do it as compared to Russian and other energy proximity and greater energy resources. If the U.S. is induced into wars that it hardly has the energy to support while other nations with oil reserves do not become so much involved, the relative energy position of the U.S. will deteriorate and it becomes so energetically weak that it could not handle its own hemispheric defense. For world stability energy differentials need to be evened out and the richer sources used first so that balance of energy resources is maintained.

As oil producing countries and associates get full industrial technology which they can readily buy as their relative richness so exceeds that of existing technological countries, their total military and economic power will grow into a new colossus. If there is a large difference in actual energy cost of getting energy between the U.S. and the producers of richer oils, the latter can determine which countries will have economic edge by sale at slightly lower prices. There is no way the U.S. can organize the non oil producers into a counter power with inferior energy sources. There might be enough storage of high energy capability in the industrial countries to try for an oil conquest if they were quick about it, but they are probably blocked by the greater soviet energy and equivalent power at that distance. It would probably mean World War III. The U.S. alone could not do it. The European countries can get their needs by joining the Arab block.

3. ENERGY COST OF SOME ACTIVITY MUST INCLUDE ALL ITS INPUTS.

A bad error is being made in much public forum discussion and in many economics papers that attempt to determine the energy use of a given process. The error arises in calculating the energy use of an activity as only that directly observed to be used by the activity, while ignoring the energy that makes possible all the other goods and services that go into that activity. For example, the energy utilization in transportation is not just the fuels used by the cars, but is also the energy spent all through the economy subsidizing the making of the cars, the roads, and the maintenance. One way of estimating the energy spent in support of such a complicated activity is to obtain the money cost and convert to the average energy expenditure per dollar as calculated from the total economy such as a figure of 17,000 kilocalories to the dollar.

4. LET'S FACE DECLINE IN TOURISM AND NOT SWEEP IT UNDER THE RUG.

If we may judge by the increase in tourism that followed the increased energy subsidy of our culture, tourism is a property that depends on high energies. As net energies go down in the U.S. so must tourism. Political attempts to keep its priority over endeavors such as getting more food and fuel energies will fail (unless there is some rich source of excess energy culture to draw tourists from). Whereas efforts to make transitions slow and non-disruptive are needed, no one is doing anyone a favor by implying that tourism will not be declining. Florida must plan for a change. One temporary step to help during an interim is to set up an air line shuttle from green lush Florida for African and Arab tourists to spend their new excess monies.

5. HUMANS OF ALL AGES WILL BE NEEDED MORE.

As energies for machines decline, many functions may take more human labor instead for the simple development of food and fiber. Thus, the young and the old will be more needed in the work force. Ultimately, displacement unemployment will be temporary as machines are replaced by people. The rising energy cost of energy will so inflate the value of money that the pension plans and other savings will be depreciated so that the amount of money that retirees can bring to Florida will decline so that they will be less an income source. We need to help them find a low energy life style without becoming a public drain.

6. TEMPORARY HIGH PROFITS SHOW UP DURING ENERGY DECLINE.

During the decline in money value, those with businesses can be misled about their future by temporary prosperity, since goods and storages done under one energy level will be sold as the price goes up; but increased money profits will be more than undermined by the inflation. The public will think the temporary profit is a conspiracy.

7. THE FOLLOWING MAY BE INDUSTRIES THAT WILL DROP OUT, AND WHICH WE SHOULD ENCOURAGE TO RECOGNIZE THEIR NEED TO DIVERSITY AND TRANSFER THEIR SKILLS TO OTHER ACTIVITY.

A. Urbanization construction will be replaced for smaller projects, most of which will be replacements.

B. Artificial vegetation will be replaced by more use of self maintaining vegetation (natural). Thus, work will decline that concerns lawns, plant nurseries, tree surgeons, manicuring parks and rights of way, golf courses, astroturfs.

C. Air conditioning will be replaced by architecture that fits human settlement into trees and microclimates of moist vegetation shade, uses winds, etc.

D. Eutrophication problems will decline as farmers bid for sewage use; ecological engineering will replace some other kinds of environmental engineering. Lowered energies will take the pressure off the environment in many situations.

E. Universities will be less occupied and will need to organize among themselves to keep society from losing valuable information accumulated during our recent energy rich periods. Creative activity will be less and knowledge custodial service may be more. Computer use will be less.

F. Farms may use more land but their functions and cycles will be more intact and their external environmental action less.

G. Tourism will be less and operating with energy attractions, using less artificial lures and a higher percentage of self maintaining natural ones.

H. The scale of activities may be reduced and decentralized with more small units replacing large unified ones. This may apply to cities sewage handling, cars, and even utilities. Agriculture will develop more local use and variety.

I. Religions concerned with adaptation and satisfaction with an uneven continued pattern will increase and religious unrest will decrease. Mental health should improve once the shock of change from growth to more level economy is passed.

J. Advertising and communications will be reduced.

K. Properties of high energy concentration will decrease: crime, wrecks, police, noise, central services and their tax costs.

L. Pine plantations for paper may decrease in favor of food production and forest management for lumber for buildings.

M. Exotic medical services will decline.

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Land Use

Formidably experienced naturalist Peter Warshall (PW) and gardeners Richard Nilsen (RN) and Rosemary Menninger (RM) researched and edited the Land Use section. From Natural History we learn grace—– that life is complexly participatory with other life or it ceases. From farm and garden techniques we learn to collect and eat sunshine with the help of other life. Because "land use" used to mean "use up," there's repair work to do.

—SB

Garden and covered fish ponds at the New Alchemy Institute, Woods Hole, Massachusetts. Ground water is steadily pumped into the ponds by an Institute-designed sailwing windmill. Holding the sun's heat, the covered ponds have algae blooms which feed the protein-rich tropical tilapia *fish. When the ponds are drained to harvest the fish, the nutrient-rich water runs downhill to irrigate and feed the garden.*

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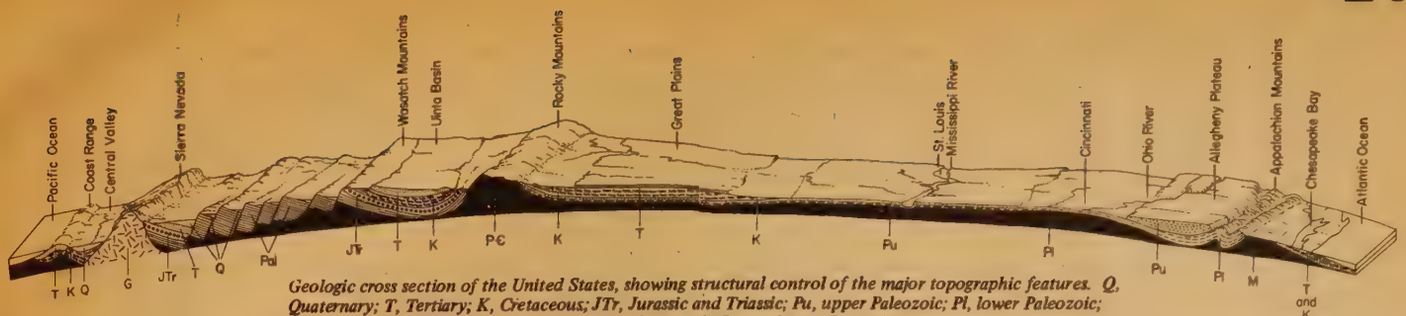


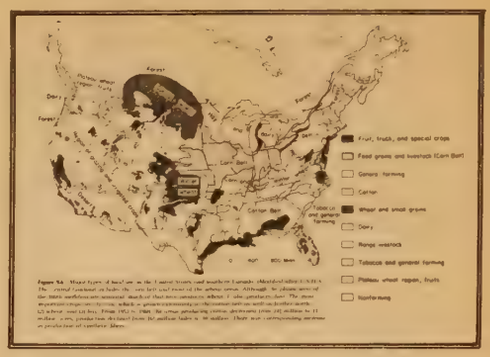
Geologic cross section of the United States, showing structural control of the major topographic features. Q, Quaternary; T, Tertiary; K, Cretaceous; JTr, Jurassic and Triassic; Pu, upper Paleozoic; Pl, lower Paleozoic; Pal, Paleozoic undivided; M, metamorphic rocks, mostly Precambrian; G, granite.

Natural Regions of the United States and Canada

Just open this book to an area you already know. Within pages, the land forms, soils, colors, plants, and importance of your watershed will intensify. An encyclopedia of physiography written in academic style. Lots of maps. Lots of geologic history. The best book to practice mapping North America into your brain.

—PW

Natural Regions of the United States and Canada
Charles B. Hunt
1967; 725pp.
$14.95 postpaid
from:
W. H. Freeman & Co.
660 Market St.
San Francisco, CA
94104
or Whole Earth



Between a third and a half of the combined area of Canada and the United States is forested and these forests constitute about 15 percent of the world's total. With only 6.5 percent of the world's population, North America is blessed with twice its share of forests.

Face of North America

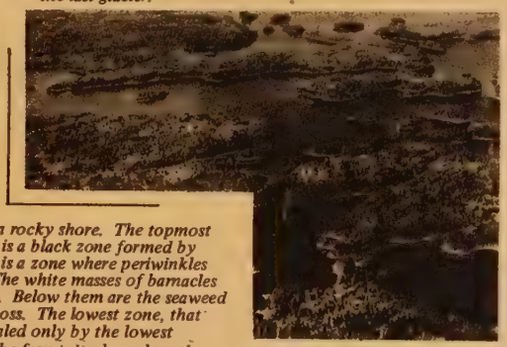
The quickest, least expensive run-through of the land forms and living creatures of North America. Needs more maps but if you've got the maps, this is a great springboard to continental consciousness.

—PW

Face of North America
Peter Farb & John Hay
1963; 316pp.
$2.45 postpaid
from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

All lakes are being filled in, inevitably turning into bogs as the vegetation creeps in from shore. Any lake that is surrounded by a ring of vegetation will not long endure. At first the lake shows little apparent change; nevertheless, submerged plants are taking root unseen, and as generations of these plants gradually raise the level of the bottom, they create a seedbed for the next stage, that of the pondweeds. These are plants adapted to a life in perpetual moisture; as their roots ramify along the shore, straining out the debris of the lake, they are imperceptibly creating land, tightening the noose of the shoreline upon the water.

The maze of waterways in Quetico-Superior is a legacy of the last glacier.

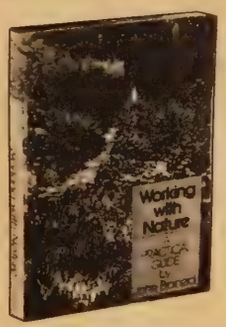


Low tide reveals the zones on a rocky shore. The topmost band, above the high-tide line, is a black zone formed by algae. Immediately beneath it is a zone where periwinkles find shelter in rock crevices. The white masses of barnacles usually mark the high-tide line. Below them are the seaweed zones of rockweed and Irish moss. The lowest zone, that of the ribbonlike kelps, is revealed only by the lowest monthly tides, at which time the fronds lie draped on the glistening rocks.

Working With Nature

Working With Nature *is a land stewardship primer. An eighth-grader would enjoy it, and an individual or a group leader looking for workable conservation projects will find lots of ideas for managing lands of all sizes. The book's design is its outstanding feature. It has an index, cross references within the text to related material elsewhere in the book, and textual references to a massive bibliography (589 entries).*

—RN



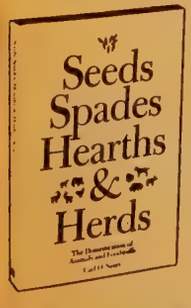
Working With Nature
(A Practical Guide)
John W. Brainerd
1973; 517pp.
$15.00 postpaid
from:
Oxford Univ. Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410
or Whole Earth

A most important principle of wildlife management is called the *edge effect*: it recognizes that wildlife is more abundant, in number of species and of individuals, at the edges between environments than in their middles. By living near an edge, an animal can quickly go to whichever environment best fills its needs of the moment. At a wood margin, a bird can fly out into a field and catch grasshoppers; sensing the shadow of a hawk, it can retreat into the protecting cover of the woods. . . Edge is in one sense a linear phenomenon, and the longer the line of edge the greater the wildlife populations. A crooked line between two points is longer than a straight one; so a wildlife manager likes irregular edges, such as crenulated borders between woods and fields, rather than straight edges, which are cheaper for a farmer who has to buy and stretch fencing. . . Edge, however, is more than linear; it is three-dimensional, because all habitats are cubic rather than just flat as portrayed on a map. A woodlot has not only the edges adjacent to surrounding fields; it also has a top edge against the sky and a bottom edge at the ground. So a bird like the red-eyed vireo, which we may think of as a typical animal of the middle of the woods, in fact spends much of its time at the top edge of the trees, while the ovenbird frequents the bottom edge, nesting and feeding on the woodland floor. . . So if you wish to increase wildlife, one of your best ways is to create more edges, either by making new environments within existing habitats or by making their boundaries more irregular.

Seeds, Spades, Hearths, and Herds

Those few gardeners and farmers left in this country who are not direct extensions of corporations eventually come to wonder where this agriculture business began and where they fit in. Supergeographer Sauer choreographs them through prehistory, all over the planet to trace the origins of crop cultivation and domestication of animals. He debunks the classical view of hungry hunters and gatherers inventing farming during bad years and suggests instead it began in cultures of plenty as an extension of leisure and even magic.

—Malcolm Terence



Seeds, Spades, Hearths, and Herds
(The Domestication of Animals and Foodstuffs)
Carl O. Sauer
1969 (2nd ed.); 175pp.
$1.95 postpaid
from:
The MIT Press
28 Carleton St.
Cambridge, Mass. 02142
or Whole Earth

Infant mammals require milk. Until there were domestic mammals, the only nurse-mother available was woman.

There are still tribes in tropical America and in Southeast Asia among whom women suckle pups, pigs, kids. By such means, the dog was actually adopted into the human family and into a specific family, within which the children were his kin. Under these circumstances, the dog may acquire a personal name and on death be mourned as any other member of the family. Somewhere, at some time, these ties became so strong as to result in domestication and the propagation of a stock that lost connection with the wild kin. . . . among the Chinese there is an elaborate legend of the marriage of an ever-faithful dog to a princess, with noble issue. Our western myths of Beauty and the Beast may have some similar origin.

•

The dominant plants of North American agriculture were maize, beans, and squashes or pumpkins. These formed a symbiotic complex, without an equal elsewhere. The corn plants grow tall and have first claim on sunlight and moisture. The beans climb up the corn stalks for their share of light; their roots support colonies of nitrogen-fixing bacteria. The squashes or pumpkins grow mainly prone on the ground and complete the ground cover. . . with few exceptions, all three were grown together. By long cultivation varieties of all were selected, able to grow to the farthest climatic limits of Indian agriculture. Civilized man has not extended the limits of any of them and has introduced only a few crops that succeed under more extreme climates. . . The Hopi, living in a land of little and late rain, of short summers and cold nights, depend on them and by them have maintained themselves and their fine and gentle culture, our civilization lacking the skills to match theirs for this harsh environment.

Natural History Catalog

Has the most extensive collection of records, folios, pamphlets and books on natural history, ecology, conservation and "outdoor life" of any store I've seen. Especially fine collection for flora & fauna west of the Rockies. Does mail order anywhere.

—PW

Lucas Book Co.
2430 Bancroft Way
Berkeley, CA 94704

MUSHROOMS

by Peter Warshall

THE INITIATION

Here are the musts:

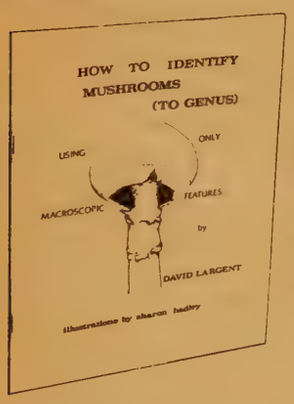
- There is no one guide so you must buy a few.
- The vocabulary and textures of mushrooms are unique and awe-inspiring. You must begin to learn the weird Latin names.
- Mushrooms produce spores that have unique qualities. To begin to learn the different kinds, you must make spore prints.
- No mushroom can be identified easily. You must gain patience. Perseverance greatly furthers.

Mushroom Collecting for Beginners
Publication 861
30 pp.
free
from:
Information Division
Canada Department of Agriculture
Ottawa K1A0C7
Canada

Simply, a free course by a Mushroom Guru (J. Walton Groves). Beautiful photos show all stages of mushroom growth. Text describes confusions that usually occur among the initiates. I wish, I wish, when I started. . . .

THE PERIOD OF DANGEROUS FOOD

Armed with a small vocabulary and spore prints, you can probably stay alive and eat pretty well. But, to immerse yourself in the mind-boggling diversity of mushrooms, to discover the deeper loves and secrets of fungi, and to expand your gourmet risks, a second commitment is needed. You must get heavily into latin names to describe the beast (many mycologists think mushrooms are animal).



How to Identify Mushrooms (to Genus)
David Largent
1973; 46pp.
$3.80 postpaid
from:
Mad River Press
Rt. 1, Box 151-B
Eureka, CA 95501
or Whole Earth

The must booklet of the Mushroom Kingdom. Exquisite line drawings. Uses only spore color and visible features. The only dumb trip in the whole leaflet is placing the labels for the drawings at the very end. Once you've made the discovery, you can simply write the label back into the text.

[Suggested by Sandra Castner — among others]

THE INTERMEDIATE GUIDES

These guides all have advantages and disadvantages. Many were mentioned on Pg. 81 of the **Last Whole Earth Catalog**. You might want all of them even before you continue into the bliss of impossible mushroom identification.

Mushroom Hunter's Field Guide Pg. 81)
Alexander H. Smith
1967; 264pp.
$9.95 postpaid
from:
Univ. of Michigan Press
615 E. University
Ann Arbor, MI 48106
or Whole Earth

Best single book. Good for all North America but especially East of Rockies. Hard to use. Key is not cross-referenced to page number. 188 varieties.

•

The Savory Wild Mushroom (Pg. 81)
Margaret McKenny
1962; 133pp.
$4.95 postpaid
from:
Univ. of Washington Press
Seattle, WA 98105
or Whole Earth

Great for Pacific Northwest. Key to mushrooms badly set-up. Great recipes. 83 varieties. Fine essay on poisons.

•

The Mushroom Handbook
Louis C. Krieger
1967; 560pp.
$3.95
from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014
or Whole Earth

Old book (1936) that's been reprinted and latin names updated. Fine scholarly work known for its great accuracy. Best for East. 225 species. No real key makes it a good reference only. Great habitat discussion.

•

A Guide to Mushrooms & Toadstools
Morton Lange & F. Bayard Hora
1963
$7.95 postpaid
from:
E. P. Dutton & Co., Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

Many friends at the San Francisco Fungus Fair switched to this book. Drawings, no photos.

HEAVY DUTY MUSHROOM LOVE

Edible and Poisonous Mushrooms of Canada (Pg. 81)
J. Walton Groves
1962; 298pp.
$7.75 postpaid
from:
Queen's Printer
Information Canada
Publishing Division
Ottawa, Ontario
Canada

Best advanced book. Great keys using a technical vocabulary. By the man who wrote for beginners. 400 species.

•

Mushrooms of North America
O.K. Miller
1972; 360pp.
$17.95 postpaid
from:
E. P. Dutton & Co., Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

New book. Untried so watch the snags. Has beautiful photos. 422 species. Best book on use of staining and microscopic features. As usual, keys and page references are badly cross-referenced. May become the standard.

MUSHROOM MISCELLANY

Mushroom Growing For Everyone (Pg. 55) Still the best.

Write the North American Mycological Association, 4245 Redinger Rd., Portsmouth, Ohio 45662 to find out the location of the nearest Mushroom Society.

For lichen (fungi plus algae) identification, buy **How to Know the Lichens** by Mason Hale (Wm. C. Brown, Pub. Dubuque, Iowa $3.50)

Kitchen Magic With Mushrooms
Mycological Society of San Francisco
P.O. Box 904
San Francisco, CA 94101

Long out-of-print, this book is magic. Puffball French fries, Blewit Duxelles, Mushroom pirog and piroshki, Ceviche Marin and on and on.

•

Indeterminacy

A record by John Cage and David Tudor of one-minute stories about mushrooms, music and the Buddha. Exacting beauty. (Indeterminacy, Folkways, No. 3704. Sold at anywhere from $8. to $12.)

—PW

Insects of the World

Of all the books I've seen while helping prepare this **Whole Earth Epilog, Insects of the World** *was the most spectacular. Everybody's dream book (except for the price). Linsenmaier is artist, photographer, naturalist, ecologist, entomologist, writer, anatomist —— just plain far out. All the usual book blurb adjectives go with this production—— up-to-date, accurate, fascinating with awe-inspiring paintings, drawings, diagrams and photos. This man's totem love is not in doubt.*

—PW
[Suggested by John Todd]

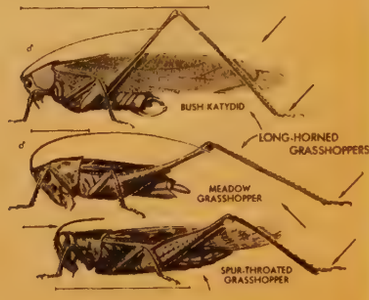
WARNING COLORS

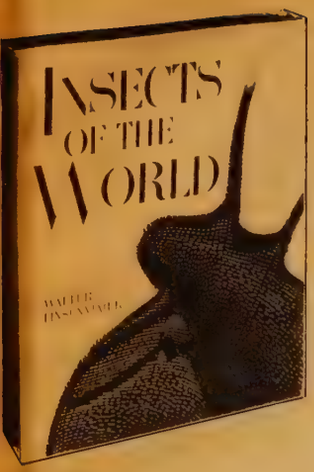
Many brightly colored insects, particularly larvae, show themselves openly and are conspicuous from afar. These insects do advertise their presence with warning colors, for they enjoy the protection of distasteful, even toxic, body fluids. There are many examples. Caterpillars that feed on poisonous herbs may carry the toxic effect through their development even to the mature form. The blister beetles *(Meloidae)* contain cantharidin, a toxin dangerous to man and beast. Many caterpillars are clothed with urticating (stinging) hairs or with thorns, some of which are filled with acid. Certain larval moths *(Dirphia)* imitate this kind of caterpillar not only in the coloration and specific hair pattern of the abdomen, but also in the contortions the body goes through.

A Field Guide to the Insects

90,000 species of insects inhabit North America: chewing lice, sucking lice, earwigs, stoneflies, spring-tails, twisted-winged parasites, butterflies, beetles, thrips and bugs. This guide covers 579 of the insect families and has at least one illustration for each. Amazing! I have rarely found the exact moth or water scorpion but always came close enough to feel good. Pretty easy to use considering the mind-boggling diversity.

Borror is also the author of the best textbook on insects (Borror, Donald and Dwight De Long, **An Introduction to the Study of Insects**. *New York: Holt, Rhinehart and Winston. 1970 (3rd Edition. $18.00.))*





Insects of the World
Walter Linsenmaier
1972; 392pp.
$25.00
from:
McGraw-Hill Bk. Co.
Princeton Road
Hightstown, NJ 08520
Manchester Road
Manchester, MO 63011
8171 Redwood Highway
Novato, CA 94947
or Whole Earth

A bombardier beetle shooting off an explosive mixture of gases. *(→ 62|1)*

swellings, from excrescences on the sides, thorax, or neck; and from hidden glands unpleasant smells and stenches come into play. Notable practitioners of chemical warfare are the bombardier beetles, which expel from the anus a cloud of gas that explodes with a modest pop.

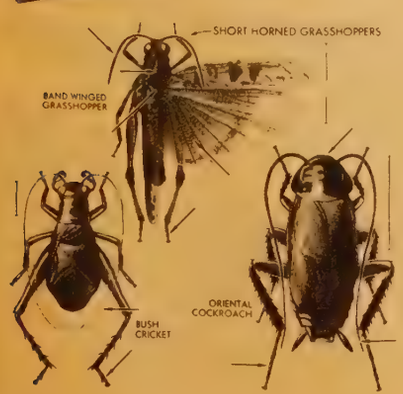
•

COCKROACHES Order Blattaria

The cockroaches are a primeval group of insects. Richly represented as early in time as the Carboniferous Period, they have persisted to the present in a direct evolutionary line and with only minor modifications. We are not fond of cockroaches, at least not of those few species that share our dwellings and foodstuffs. But the cockroach is not easy to catch. It can run very fast thanks to its especially strong coxae, the leg segments that join with the body. And the insect's flattened, oval build allows it to take refuge in narrow crevices, within which it even can move backward, feeling its way with a posterior pair of appendages (cerci) that might almost be dubbed "abdominal antennae."

Let us not leave unmentioned the protective sting of female wasps and the piercing beak of the assassin bugs and other predatory bugs. Nor should we neglect the chemical armament of various brightly colored insects. Toxic blood or acids are squirted out through the skin, from leg joints, wing covers, and body openings, or sprayed forth or spit out, or even exuded in a sweatlike foam. Odorous glandular reservoirs are everted, in the form of threads, horns, or

A Field Guide to the Insects
(of America North of Mexico)
Donald J. Borror &
Richard E. White
1974; 404pp.
$4.95 postpaid
from:
Houghton Mifflin Co.
Wayside Rd.
Burlington, MA 01803
or Whole Earth



Spiders and their Kin

The most informative, accurate, entertaining and useful Guide to spiders ever written.

—PW

Spiders and their Kin
Herbert & Lorna Levi,
& Herbert Zim
1968; 160pp.
$1.50 postpaid
from:
Golden Press
P.O. Box 700
Racine, WI 53404
or Whole Earth

"How to Know" Series

Good technical illustrated keys for those naturalists that get heavily into knowing all that's happening.

—PW

How to Know the Immature Insects ($3.50)
How to Know the Insects ($3.25)
How to Know the Butterflies ($3.75)
How to Know the Beetles ($4.50)
How to Know the Grasshoppers ($4.50)
How to Know the Spiders ($4.25)

Pictured Key
Nature Series

from:
William C. Brown & Co.
2460 Kerper Blvd.
Dubuque, IA 52001
or Whole Earth

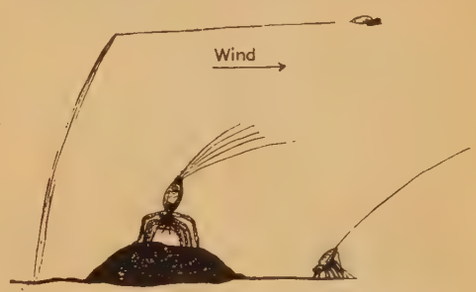
Spiders, Scorpions, Centipedes & Mites

What has a segmented body and more than six legs? Just about every creature in this book. The language is perhaps too latinate but, then again, who's ever developed a loving language to describe a mite.

—PW

Spiders, Scorpions, Centipedes & Mites
J. L. Cloudsley-Thompson
1968; 278pp.
$4.50 postpaid
from:
Pergamon Press, Inc.
Maxwell House
Fairview Park
Elmsford, NY 10523
or Whole Earth

Much of the adventure and risk in the life of the spider is crowded into the first few days of freedom when the young spiderlings, having first left their egg sac, climb over the stems of plants and up the leaves of grasses, stringing their threads as they go. Soon a tangle of webs springs up, crossing in all directions and covering the vegetation. When the young spider has reached the summit of the nearest promontory— a weed, a bush or a fence— it turns to face the wind, extends its legs so that it appears to be standing on tiptoe and lets air currents carry the silk from its spinnerets. When the friction of the currents against the threads exerts sufficient pull, the spider loosens its hold and usually sails away: at the take off, at least, it is dragged backwards. Sometimes, after take-off, the spider climbs rapidly to the middle of its thread, which then sweeps forward and becomes doubled. Less frequently the spider makes a forward start. This method is employed by small spiders which make a weak attachment to a support and allow themselves to be blown outward and upward until the thread snaps near its hold.



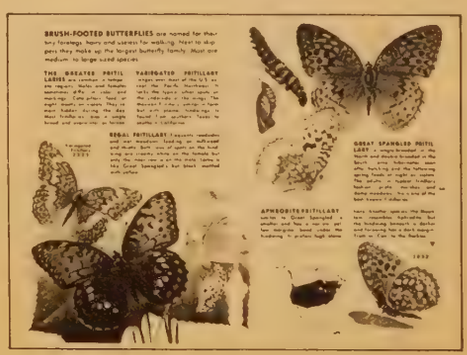
Ballooning by young spiders.

Butterflies and Moths

No book on moths and butterflies of North America has yet to knock me out. This little guide has about 3% of the 10,000 North American species. There is no real key but, by flipping through, I usually find the critter most like the one I saw. **The Butterfly Book** *and* **The Moth Book** *by William Holland (New York, Dover, $5.00) are more technical but also very complete.*

—PW

Butterflies and Moths
(A Golden Nature Guide)
Robert T. Mitchell &
Herbert Zim
1964; 160pp.
$1.50 postpaid
from:
Golden Press
P.O. Box 700
Racine, WI 53404
or Whole Earth



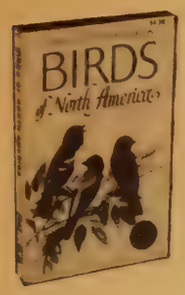
LAND USE

Birds of North America

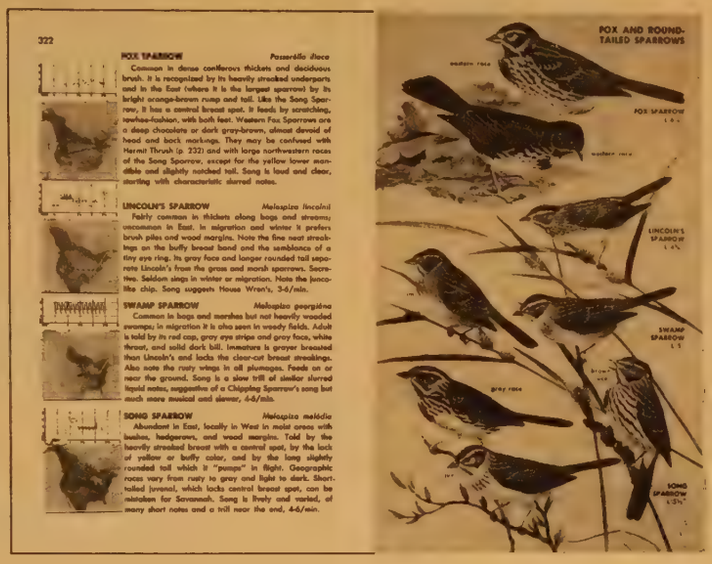
No guide is a turn-on. Except when you're already turned on. To the birds. Not the picture of the bird nor information about the bird. A good guide is portable, quickly gives you habitat, migration, locality, size, color patterns, and easily seen habits. No book guide has helped anyone to learn bird songs. I like a guide that coughs up the NAME of the bird without distracting me from the actual trip of being there with binoculars, my hearing, and flashing wings.

In spite of problems with color reproduction and totally fucked-up pages on the western flycatchers, Golden's little Birds of North America *provides the easiest access to bird identification. Drawings are conveniently opposite all the song, locality and comparative information. The book has summary pages of confusing groups like the sparrows, warblers and hawks. It also has accurate little vignettes on typical flight patterns and behavior like tail-wagging that makes it all the easier.*

—PW



Birds of North America
(A Golden Field Guide)
Robbins, Bruun, Zim, and Singer
1966; 340pp.
$4.50 postpaid
from:
Golden Press
P.O. Box 700
Racine, Wisc. 53404
or Whole Earth



Living Reptiles of the World
Living Amphibians of the World
Living Mammals of the World

A good place to gain a Whole Earth perspective. These books are more a combo of bestiary-dictionary than an encyclopedia of biology. So, there are many wonderful photos of the weirdos and descriptions of how the mudpuppy is related to the olm. The amount and accuracy of information

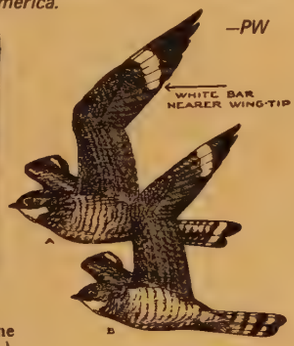
Living Reptiles of the World
Karl Schmidt and Robert Inger
1957; 287pp.
$14.95 postpaid

Living Amphibians of the World
Doris Cochran
1961; 199pp.
$16.95 postpaid

Peterson Field Guides

Peterson's guides run a close second to the Golden Guide but, except for his pointer technique, most important information is stashed on some other page. Migration dates and localities are totally difficult unless you can instantaneously conjure the map and seasons of North America.

—PW



A Field Guide to the Birds (Eastern N.A.)

A Field Guide to Western Birds

A Field Guide to the Birds of Texas and Adjacent States

All **$5.95** postpaid

from:
Houghton Mifflin Co.
Wayside Rd.
Burlington, MA 01803
or Whole Earth

A Field Guide to Mexican Birds

The most beautiful plates by Peterson I've seen. Synthesizes all previous bird books on Mexico. Carry this book and follow Peter Alden's advice in Finding Birds in Western Mexico *[Sonora, Sinaloa & Nayarit] (University of Arizona Press, 1969; $5.95) and Ernest P. Edwards'* Finding Birds in Mexico *[all other states] (write the author in Sweet Briar, Virginia; $5.50). Edwards also has a fieldguide with spanish bird-name equivalents.*

—PW

A Field Guide to Mexican Birds
Roger Tory Peterson and Edward Chalif
1973; 298 pp.
$8.95 postpaid
from:
Houghton Mifflin Co.
Wayside Rd.
Burlington, Mass. 07803
or Whole Earth

Restore this book

In 1961, a huge, beautiful volume called **Birds of the World** by Oliver Austin was published by Golden Press, New York. For a whole earth survey of the Bird kingdom, this book was unbeatable—— even at $16.95. Now out of print, pieces of the book can be found in other publications. One stenographic particle is called: **Families of Birds** by Oliver Austin, A Golden Science Guide, 1971, Golden Press, New York. $1.95. A paperback of **Birds of the World** would be welcome.

—PW

Point Reyes Bird Observatory Field Trips

Not for the lazy. These fast paced, high energy bird trips will boggle your eyes. The human guides that lead the PRBO trips will tune your ear right into the kingdom of bird sound. Relatively cheap, some trips go down to San Blas (Mexico), others transect California or the Southwest. Write to PRBO, Box 321, Bolinas, Ca. 94924.

—PW

REGIONAL GUIDES AND BIRD WATCHING AIDS

To beef out the perception of your newest bird, there are some great books that you will either leave in the car or at home. Bent's Life Histories of North American Birds *(Dover Paperback, varied prices $3.50 to $4.50 per volume) has extended sketches on each species; Kortright's* The Ducks, Geese and Swans of North America *has eclipse plumages, hybrids, and downy young beautifully illustrated; Pough's* Audubon Western Guide *are good home supplements.*

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These are the best regional bird books. Many have maps on where to bird local sanctuaries and interesting bird communities. Many of the best books are out of print.

WESTERN UNITED STATES

Hoffman's Birds of the Pacific States*; Gabrielson and Jewett's* Birds of the Pacific Northwest *(Dover, 1970, $5). Lane's* A Birder's Guide to Denver and Eastern Colorado; A Birder's Guide to Rio Grande Valley of Texas; A Birder's Guide to Southern California; A Birder's Guide to Southeastern Arizona; A Birder's Guide to the Texas Coast.

EASTERN UNITED STATES

Barbour, et. al.'s Kentucky Birds *(Univ. of Kentucky Press, 1973, $9.75); Chapman's* Handbook of Birds of Eastern North America *(2nd Edition, 1940, Dover, $5.00); Forbush's* Birds of Massachusetts and other New England States*; Oberholser's* Bird Life of Louisiana*; Pearson and Brimley's* Birds of North Carolina*; Robert's* Birds of Minnesota*; Todd's* Birds of Western Pennsylvania*; Wayne's* Birds of South Carolina.

ISLANDS ASSOCIATED WITH NORTH AMERICA AND THE OCEANS

W.B. Alexander's Birds of the Ocean *(Putnam, $5.95, 1963); A.J. Berger's* Hawaiian Birdlife *(Univ. Press of Hawaii, 1972, $15.00); J. Bond's* Birds of the West Indies *(2nd Ed., 1971, $8.95, Houghton Mifflin).*

ALASKA AND CANADA

Gabrielson and Lincoln's Birds of Alaska*; Godfrey's* The Birds of Canada*; Taverner's* Birds of Canada*; Tuft's* Birds of Nova Scotia*; Snyder's* Arctic Birds of Canada.

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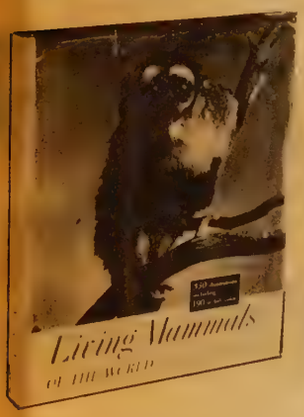
especially in the reptile and amphibian books—— is impressive.

For an elementary introduction to all aspects of mammalian and reptilian life (ways they eat, sleep, shelter themselves), the Time-Life Nature Library (The Mammals by Richard Carrington and The Reptiles by Archie Carr, both 1963, Time Inc., New York, $5.70) make organic perusing.

—PW

[Suggested by Joe Copp]



Living Mammals of the World
Ivan Sanderson
1961; 303pp.
$15.95 postpaid

from:
Doubleday & Company, Inc.
501 Franklin Ave.
Garden City, L.I. N.Y.
11530
or Whole Earth

Changes in color in the frogs' skin are not for the aesthetic edification of the frogs themselves, but are indications of skin response to air humidity, temperature, and the nervous condition of the individual frog.

The flash colors shown by many species whose skin secretions are poisonous constitute a warning not to bigger amphibians but to creatures of higher intelligence such as wolves and foxes.

The eyes of terrestrial frogs in particular are so placed as to give them a maximum perception of approaching enemies. The eyes project beyond the level of the skull, a most effective manner of seeing in front, to the side, behind, and above at the same time, for on their eyesight depends their very existence—— and they are a most attractive tidbit to nearly every other wild creature around them.

On account of our great familiarity with them, we are inclined to forget that turtles are really the oldest type of living reptiles, vastly more ancient in lineage than the fossil dinosaurs and most of the other extinct forms. The turtles really deserve the name of "living fossils" much more than do some of the creatures to which it is commonly applied. There are only twelve families among the existing turtles, and a few more than two hundred species. It is fortunate for those who study them that these existing forms include almost all of the types of turtles, extinct as well as living.

THE TOP TEN IN REPTILES AND AMPHIBIANS

by Joe Copp

Gnomes of the Night: the Spadefoot Toads by Arthur Bragg. 1965. University of Pennsylvania Press, Phila. 127 pg. $7.00

So Excellent A Fishe: A Natural History of Sea Turtles by Archie Carr. Natural History Press. See page 480.

Turtles of the United States by Carl Ernst and Roger Barbour. 1972. Univ. of Kentucky Press, Lexington. 347 pg. $22.50.

Snakes: The Keeper and the Kept by Carl Kauffeld. See Learning, Nature.

Rattlesnakes: their habits, life histories and influence on mankind by Laurence Klauber. 1972. 2nd Edition. Univ. of California Press, Berkeley and Los Angeles. 2 volumes. 1533 pages. $50.00.

The Last of the Ruling Reptiles: Alligators, Crocodiles, and their Kin by Wilfred T. Neill. 1971. Columbia Univ. Press, N.Y. 486 pg. $15.95.

The Natural History of North American Amphibians and Reptiles by James Oliver, 1955. D. van Nostrand Co., Inc. Princeton, N.J. 359 pg. Out of print.

Herpetology by Kenneth Porter. 1972. W.B. Saunders, Phila. 524 pg. $15.50.

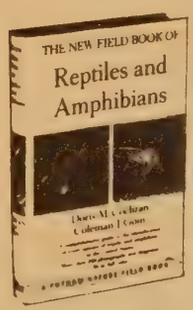
Of Scientists and Salamanders by Victor Chandler Twitty. 1966. W.H. Freeman and Co., San Francisco. 178 pg. $5.50.

The New Field Book of Reptiles and Amphibians

In a single volume, all the American species of snakes, salamanders, frogs and crocodiles—— including Hawaii and Alaska. I had problems trying to find the species I was looking for but, once I did, the information was accurate and easily understood.

—PW

[Suggested by Joe Copp]



The New Field Book of Reptiles and Amphibians
(A Putnam Nature Field Book)
Dorris Cochran and Coleman J. Goin
1970; 359pp.
$5.95 postpaid
from:
G.P. Putnam's Sons
200 Madison Avenue
New York, N.Y. 10016
or Whole Earth

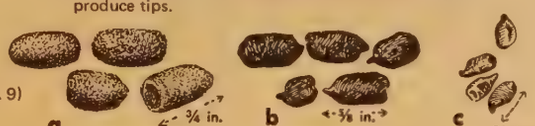
A Field Guide to Animal Tracks

Thanks to Murie, this is the only Peterson guide to sound human. Just good ol' backwoods details that tell you "The Animal's been here." Eaten branches, scratch marks, tracks and scats, sounds and smells.

—PW

A Field Guide to Animal Tracks
(Peterson Field Guide Series No. 9)
Olaus Murie
1954; 374pp.
$5.95 postpaid
from:
Houghton Mifflin Company
Wayside Road
Burlington, Mass. 01803
or Whole Earth

The shape of the track of the mule deer will vary somewhat with the type of ground on which the animal lives. On soft soil, as in some woodlands, the toes are likely to be relatively more pointed. On hard, rocky ground, found in some areas occupied by these deer, the hoofs are worn enough to produce tips.



a. Winter droppings of adult male (Dinosaur Natl. Monument, 1950).
b. Autumn droppings of adult male (Wyo., Nov. 8, 1938).
c. Fawn droppings (Wyo.).

Mule deer droppings, about 2/3 natural size.

A Field Guide to Reptiles and Amphibians

West: Better distribution maps, more illustrations of color variations (like the western garter snake group) and even pictures of tadpoles and salamander larvae—— this guide is great for the southwest and area west of the Rockies. If you find something weird, it's probably a real discovery. Everything else Stebbins has covered.

East: Conant is older and less beautiful but equally useful for the eastern species.

—PW

A Field Guide to Western Reptiles and Amphibians
(Peterson Field Guide Series No. 16)
Robert Stebbins
1966; 279pp.

A Field Guide to Reptiles and Amphibians (Eastern N. America)
(Peterson Field Guide Series No. 12)
Roger Conant
1958
$5.95 each postpaid
from:
Houghton Mifflin Company
Wayside Road
Burlington, Mass. 01803
or Whole Earth

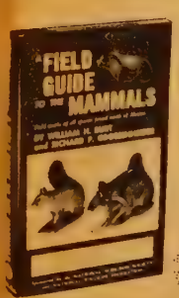
A Field Guide to the Mammals

Although the drawings are mediocre (at least, the color plate reproductions), this is the best general guide to all of North America.

I found difficulties with his subdivisions and descriptions of the Rocky Mountain chipmunks but, by using the annotated bibliography, you can get the needed details. Great section on skulls and many foot-print diagrams.

For Mexico, use Aldo Starker Leopold's **Wildlife in Mexico** *(University of California Press, Berkeley, 1959, $18.50.)*

—PW



A Field Guide to the Mammals
(Peterson Field Guide No. 5)
William H. Burt and Richard Grossenheider
1952, 1964; 284pp.
$5.95 postpaid
from:
Houghton Mifflin Company
Wayside Road
Burlington, Mass. 01803
or Whole Earth

Humpback Whale (40-50 ft.)

Best Mammal Books

GENERAL

A Natural History of Mammals by Francois Bourliere (Third Edition), Knopf, **$7.95**

Mammals of North America by Robert T. Orr (North American Nature Series), Doubleday, 1971, **$9.95**

SPECIFIC

Bats by Glover Allen, Dover, 1939 (1967), **$3.50**

Bats of America by Roger Barbour and Wayne Davis, Univ. of Kentucky Press, 1969, **$17.50**

The Life of the Shrew by Peter Crowcroft, Reinhart (London), **$5.95**

Mice All Over by Peter Crowcroft, Dufour (London), **$5.95**

Voles, Mice and Lemmings by Charles Elton, Hafner Service, 1942 (1971) **$23.10**

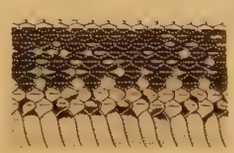
The Ecology of Invasions by Animals and Plants by Charles Elton, Halsted Press, 1966, **$5.00**

A Herd of Red Deer by F. F. Darling, 1937, Oxford Univ. Press, **$10.25** (A paperback edition was available from the American Museum of Natural History, New York)

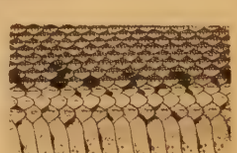
In the Shadow of Man by Jane Van-Lawick Goodall, Dell ppbk, 1972, **$1.50** (Chimpanzees)

Year of the Seal by Victor Scheffer, Scribner ppbk., **$2.65**, 1970

Mountain Sheep by Valerius Geist, Univ. of Chicago Press, 1970, **$15.50**



Santa Cruz (*atratus*)



Two-striped (*hammondi*)

Fig. 29. Pattern variation in Western Aquatic Garter Snake

Cream Rises
NATURAL HISTORY

Insects of the World *Best illustrations ever* 477
Biology of Plants *Definitive, sumptuous* 482
Ecology *Best theory* 461
Audubon *Life-magazine* 374
Atlas of Evolution *The big picture* 462
Birds of North America *Best bird book* 478
Atlas of Wild Animals *Coffee table* 460
The International Book of Trees *Coffee table* 485
National Geographic *Classic magazine* 300
A Sand County Almanac *Land ethic* 13
Wildlife in America *Sorry history* 480
Walden *How to notice* 47
Evolution and Design in the Plant Kingdom *Architecture* 84
Golden Handbooks *Best intros* 372
A Field Guide to Animal Tracks *Friendly guide* 479
Pigs for the Ancestors *Anthro-biology* 454
Watership Down *Fictional rabbits* 713
The Buffalo Book *The compleat bison* 491
Gazelle Boy *Wisdom from a wild child* 728
Golden Handbooks *Science/nature learning best bets* 373, 389, 729
Care of the Wild Feathered and Furred *Grass roots* 728

Wildlife in America

From Daniel Boone to DDT, from a 1616 proclamation to protect the Bermuda green sea turtle (now extinct) to the US Wilderness Bill of 1959, this is the most solid history of diversity reduction in North America. A thorough, complete appendix on all endangered North American species. **Lost Wild America** *by Robert McClung (William Morrow Press, 1969) continues the story ten more years using many illustrations and quotes from Matthiessen's book. A simpler book with a strange optimism. Read* **Audubon** *magazine (Pg. 374) for the contemporary news.*

—PW

Wildlife in America
Peter Matthiessen
1959; 303pp.
$2.25 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, N.Y. 10022
or Whole Earth

"Everybody knows," one naturalist has written, "that the autumn landscape in the north woods is the land, plus a red maple, plus a ruffed grouse. In terms of conventional physics, the grouse represents only a millionth of either the mass or the energy of an acre. Yet subtract the grouse and the whole thing is dead."

It was a great memorable day when the first flock of passenger pigeons came to our farm ... I have seen flocks streaming south in the fall so large that they were flowing over from horizon to horizon in an almost continuous stream all day long, at the rate of forty or fifty miles an hour, like a mighty river in the sky, widening, contracting, descending like falls and cataracts, and rising suddenly here and there in huge ragged masses like high-splashing spray. How wonderful the distances they flew in a day—— in a year—— in a lifetime!

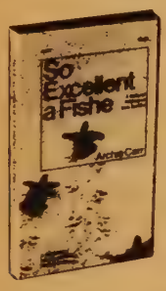
The buffalo is gone, and of all his millions, nothing is left but bones ... Those discordant serenaders, the wolves that howled at evening about the traveller's camp-fire, have succumbed to arsenic and hushed their savage music ...

—Francis Parkman (1892)

So Excellent a Fishe

Each human, whose senses are open, will be spoken to by some land form or living creature. He/she will, without too much forethought, become involved and, through the involvement, wind up defending the animal, plant or geography. Archie Carr's totem is TURTLE, especially sea turtles. Though written like a scientist, you can hear the Carib drums.

—PW



10 Young green turtle, showing serrated lower jaw characteristic of Chelonia and probably associated with the grazing habit

So Excellent a Fishe
(A Natural History of Sea Turtles)
Archie Carr
1973; 266pp.
$2.95 postpaid
from:
Doubleday & Company, Inc.
501 Franklin Ave.
Garden City, L.I. N.Y.
11530
or Whole Earth

In meditating on possible guidance processes in the Ascension migration it is necessary to decide whether you think that it is bound to involve more than a compass sense. If there were no current, say, and no waves—— at least no angling waves—— and if the turtle left Recife on the correct course to Ascension, how long would she be able to keep heading toward the island by compass sense alone? That is, if the right initial heading was due east, how long would that remain the right heading, and how wrong would it have become by the time the turtle reached the longitude of Ascension? Said still another way: for an animal swimming in open sea, a bilaterally symmetrical animal who pushes just as hard with her right flipper as with her left, and who has no barnacles off-center on her shell, how close would she come to hitting a five-mile target after a thousand-mile swim, if she guided herself by compass sense alone?

•

It is at that point that the evolution of a celestial guidance system for the Ascension migration seems obviously impossible. Too much equipment had to evolve too quickly. If any other theory seemed less wild I would quickly clutch it; but none does. All the other conceivable means of highseas travel orientation—— by detection of features of the earth's magnetic field or by responding to accelerations of the Coriolis Force, by inertial-sense dead-reckoning, by piloting with hidden landmarks—— all these at present seem to me even less plausible than the celestial-navigation theory. So it really appears impossible that turtles or terns could ever gather at Ascension—— and yet they do.

Mind in the Waters

Finally, a book on cetaceans (whales, dolphins, and porpoises) that isn't a book on whaling. Instead, an assemblage of writings and illustrations celebrating human and whale involvement with each other.

There's Farley Mowat, Lilly, D. H. Lawrence, Gregory Bateson—— and lots more talking about the whales and dolphins in such a way that you obviously don't want them exterminated. Beautiful color photos by Bill Curtsinger and a fine appendix on the present status of cetacean populations. Money goes to Project Jonah—— the lead group trying to save cetaceans. I'm sure the paperback edition will be out in 1975.

—PW

Mind in the Waters
Joan McIntyre, ed.
1974
$14.50 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, N.J. 07512
or the Sierra Club
or Whole Earth

Our quarry broke surface some five hundred yards away on the starboard bow and began his silent, terrible death struggle. If whales could utter cries which could rend the heart their deaths would be less dreadful than this losing battle which our whale was now engaged upon, in silence broken only by the far-off screaming of clouds of sea birds. We could not even hear the thrashing of crimsoned foam as he writhed and plunged, spouting a bloody spray at first, then an upgushing, followed by a bubbling upwelling amid a spreading island of blood. Suddenly the struggle ceased, the red foam subsided and we could see the body lying on its side quite still, one flipper sticking out of the water. The birds busied themselves above and around it with shrill cries.

•

It is pretty obvious that dolphins and porpoises have a very strong sense of manners, of what they consider to be appropriate behavior. One story of dolphin ethics is George Hunt's story about Sissy, a porpoise in the West Indies. John Lilly wanted to make a film of a porpoise rescuing a human being in the water. So George gets in the water and pretends to be in distress. Sissy comes over and rescues him by pushing him to the side. Lilly is filming this, but when he looks at the camera he finds that the cap is still on the lens. So he takes the cap off the lens and sends George back into the water. When George pretends to be in distress again, Sissy beats him up.

—Bateson

ENDANGERED SPECIES

The **Red Data Book** published by the International Union for the Conservation of Nature contains all the endangered species of the world. Each page is replaceable as the species changes from potentially endangered to about-to-go-extinct. For the USA, see **Rare and Endangered Fish and Wildlife of the United States** (Resource Publication No. 34) compiled by the Bureau of Sports Fisheries and Wildlife in 1966. The here-and-now news is available in **Audubon Magazine** (National Audubon Society), **Conservation News** (National Wildlife Federation), **Natural History** (American Museum of Natural History) and **Defenders of Wildlife News** (Defenders of Wildlife). All these organizations and many more can be found in the Conservation Directory, 1974 listed on page **467**.

A SELECTION OF BOOKS ON ENDANGERED SPECIES

The Blue Whale by George Small, Columbia University Press, ppbk. $3.95

A Whale for the Killing by Farley Mowat, Penguin ppbk., $1.50.

Never Cry Wolf by Farley Mowat, Dell ppbk., $0.75.

The Last of the Loners by Stanley P. Young, Macmillan, 1970, $9.95. A history of America's most famous wolves.

Biography of a Grizzly by Ernest Thompson Seton, Schocken ppbk., $1.95.

Lives of the Hunted by Ernest Thompson Seton, Schocken, $1.95.

The Swans by Peter Scott and the Wildfowl Trust, Houghton Mifflin, 1972, $15.00.

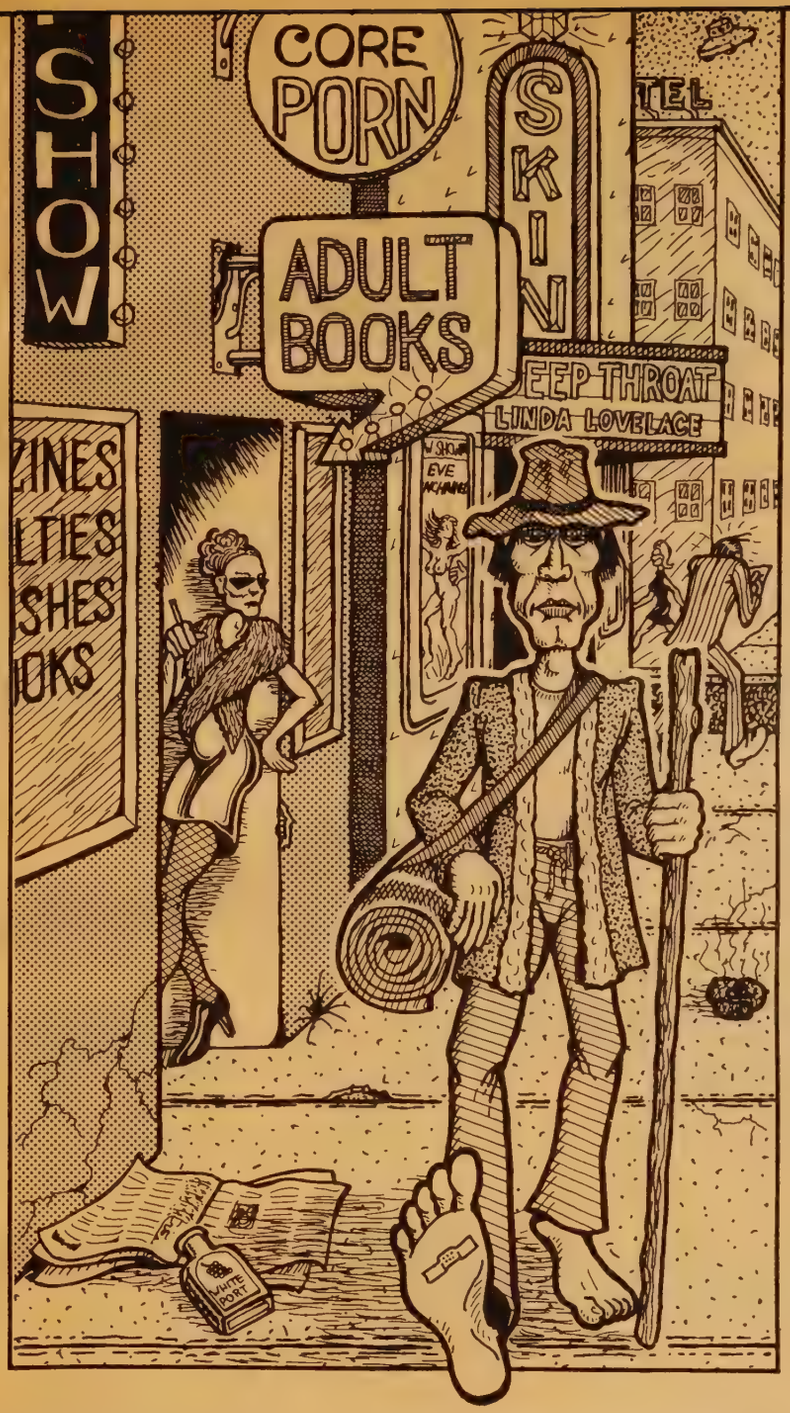
Must They Die: The Strange Case of the Prairie Dog and the Black-footed Ferret by Faith McNulty, 1971, Doubleday, $4.95.

The Buffalo Hunters by Mari Sandoz, Hastings House, 1954 (Out of Print).

—PW

TONGUE FU

by Paul Krassner



A few years ago, an American married couple, who were both working for the U.S. Census Bureau, decided to have their baby by induced labor so that it would be included in the 1970 census figures.

This story is dedicated to that child.

"Losing is like dying."
—*Washington Redskins Coach George Allen*

"The only thing to be afraid of is failure."
—(Kung Fu) *television show*

"If you feed a starving person Ex-Lax, all you get back is the Ex-Lax."
—*Alexander King*

PART ONE

1

CAPTAIN MEDIAFREAK TAKES A TRIP

Click!

The Statue of Liberty is wearing a huge brassiere. A disembodied female voice asks in a sultry whisper: "Do your huddled masses yearn to breathe free?"

Click!

A young man in Army fatigues is juggling several tear-gas grenades and rifles-with-bayonets-extended alternately in the air, accompanied by the band playing a schmaltzy rendition of *Come On, Baby, Light My Fire.*

Click!

"— confessed to police today," a newscaster is saying as he taps his foot in rhythm with his speech, "that he had been hired by a Safeway Supermarket to put *Kosher for Passover* labels on canned foods which were not actually kosher—"

Click!

Striding barefoot in the sunset along 42nd Street comes Tongue Fu. Under a floppy hat and bangs-covered forehead, his eyes reveal an ancestry that is half Japanese and half American. He is carrying a rolled-up sleeping bag. On his back is a knapsack.

It has been a lengthy journey. First, a freighter across the Pacific Ocean. Then, a bus from San Francisco to New York City. Now he stands on the sidewalk, watching with fascination as a pizza maker throws his lump of dough over and over toward the ceiling.

After a little while, the pizza maker scowls at him through the large window that separates them. In response, Tongue Fu parts his lips slightly. Gradually, he sticks out his tongue at the pizza maker, inch by mottled red inch.

The pizza maker ogles in amazement. For Tongue Fu's tongue is approximately fifteen inches long. The lump of dough falls on the pizza maker's head while he stares in disbelief.

Tongue Fu walks away, a satisfied expression on his face....

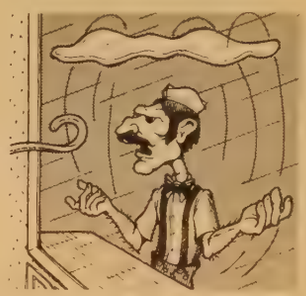
Flashiebackie:

The venerable teacher, Say When Daddy, glazed blind eyes set off by a white Van Dyke goatee, holds out a small item in his hand.

"Anteater," he says to young Tongue Fu— placing him at a proper distance by putting his other hand on the freshly-shaved head of his student and biological son— "quickly, snatch this peyote button from my hand."

Out darts Anteater's unusually long tongue. But Say When Daddy closes his fist with plenty of relative time to spare. He smiles with patient understanding.

"Tough nookie," he says. "You must always remember that whether your gift of tongue is to be a curse or a



blessing depends upon how skillfully you learn to manipulate it. Only after you have thoroughly mastered the art of liberation will you be able to flow with the commerce of exploitation which is the other side of that coin along whose ridged edge you wish to roll through life. All right, Anteater, you may put your tongue back in your mouth now...."

Inside an abandoned Times Square newsstand, Captain Mediafreak is tripping in his basket. He has no legs and only one arm. At the exact instant that a temporary power failure shuts off his color television set, Tongue Fu knocks on his door.

Captain Mediafreak gets an adrenalin rush as his heartbeat suddenly increases. He hardly ever has visitors. He points his TV channel selector, trigger finger ready, at the tall stranger who begins to enter and speaks in a halting manner.

"Please. I do not intend to startle you. I merely seek shelter for the night."

"Hey, that's really weird. I was just watching you on the tube. I must've dropped too much acid this time. Every Thursday evening I ingest a few tabs of LSD as my own private religious ritual."

"Is not too much enough?"

Captain Mediafreak nods his curly blond head, upon which sits an American Airlines Junior Astrojet pilot cap.

"Anyway," he says, "of course you can stay here." He lights a candle. "I sure hope the power goes back on soon. Norman Mailer's on Dick Cavett tonight."

Tongue Fu empties out his knapsack, which, except for a custom-tailored edition of the *I Ching*, a cooking pot, a box of matches, packets of herbs, a toothbrush and a kazoo, is completely filled with soy beans.

"Listen," Captain Mediafreak says, "how come you did that thing to the pizza maker with your tongue?"

"I am a mutation. That is all I know."

"No, I don't mean <u>how</u>. I mean <u>why</u>?"

"It was an act of altruism. The pizza maker now has a new daydream to occupy his mind when he is working. Also a conversational tidbit to share with his friends."

Tongue Fu rolls out his sleeping bag onto the floor. He sits on top of it in the lotus position. His hands hover just above his knees, palms upward, thumbs and forefingers forming a bridge of his outstretched tongue.

"Wow," says Captain Mediafreak. "I'll bet you can give yourself great head."

Tongue Fu withdraws his tongue back into his mouth in order to answer.

"I do not. I remain celibate so long as I continue in search of my soulmate. But first I must find my mother. And my sister. I have never known either. That is why I have come to America."

When the electricity returns, Dick Cavett is asking: "Do you write better before or after sexual intercourse?"

"During," replies Norman Mailer, switching to W.C. Fields' voice. "One might even say that one best lubricates one's heroic writing instrument with the tart nectar of Bartholin's glands."

[*Continued, page* 489]

Biology of Plants

I first heard of Peter Raven from a mind-blowing article about flower shapes, pollination and energy. Later, I met one of his students (Dennis Breedlove) whose intimacy with plant life floored all my previous vegetative understandings. This is Raven's textbook. Somewhat technical but so beautifully illustrated and so comprehensive: origins of life, DNA, cell life, the sun and its powers, water and soils and their powers, genetics, plant family groups, evolution and co-evolution, plant growth and ecology. Most of the textbooky prose avoids irritating my more peyote sensibilities.

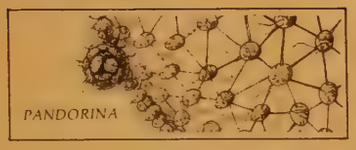
—PW

Gods, what a book.

—SB

Biology of Plants
Peter Raven &
Helena Curtis
1970; 705pp.
$12.95 postpaid
from:
Worth Publishers
444 So. Park Ave.
New York, NY 10016
or Whole Earth

Lupinus arcticus *grown from a seed at least 10,000 years old. The seeds were found by a Yukon mining engineer in lemming burrows deeply buried in permanently frozen silt of the Pleistocene age.*



Luminescent fungi (Mycena lux-coeli) *photographed by their own light. In most organisms, the energy transferred to* ATP *is used in cellular work. In some, however, the chemical energy is sometimes reconverted to light energy. Bioluminescence is probably an accidental by-product of energy exchanges in most luminescent organisms, such as the fungi shown here. In some, however, such as fireflies, in which the flashes serve as mating signals, bioluminescence has come to serve a useful function.*

What Kinda Cactus Izzat?

Totally corny. Totally great. Yes, you can even learn dem cacti names.

—PW

What Kinda Cactus Izzat?
("Who's Who" in the Desert)
Reg Manning
1941; 107pp.
$2.25 postpaid
from:
Reganson Cartoon Books
Phoenix, AZ 85010
or Whole Earth

The jumping Cholla is covered with a mass of thistle-white needles that appear soft and harmless. But barely brush against 'em and they attach to you. The joints of the Cholla are so loosely attached that, in the resulting activity, a whole section may break loose and come with you. The victim of the jumping cactus may not realize that he has even touched the plant until he feels it take hold. When he comes to earth, he may be some distance from the offending plant—— and, invariably, he will swear that the piece sticking to him JUMPED across the intervening space to make the attack.

How to Identify Plants

There is no easy road into plant architecture. Ovaries are superior or inferior; flower parts can be imbricate or valvate; surfaces can be scurfy, scabrous, comose, viscid, glaucous or otherwise. If you want to make the leap into botanical terms and use the more technical floras, then this book is the key to MONSTER VOCABULARY. Lists all the best technical floras by area. What a relief!

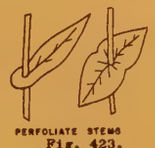
—PW

How to Identify Plants
H. D. Harrington and
L. W. Durrell
1957; 203 pp.
$2.75 postpaid
from:
The Swallow Press Inc.
1139 South Wabash Ave.
Chicago, IL 60605
or Whole Earth

Perfoliate. Where the leaf has the stem apparently passing through it, or where opposite leaves are joined around the stem at their bases. Fig. 423.

Fig. 421.

PELTATE LEAF
Fig. 422.


PERFOLIATE STEMS
Fig. 423.

WILDFLOWER GUIDES BY COLORS

Can't stand learning the tech words? These guides are arranged by color with additional details within the color section.

NORTH AMERICA: **A Golden Guide: FLOWERS** *by Herbert Zim & Alexander Martin.*

EAST: You need only one: **A Field Guide to Wildflowers** *by Roger Tory Peterson and Margaret McKenny (Peterson Series No. 17). ($3.95).*

WEST: You need a few books. The best series is by Philip A Munz: **California Spring Wildflowers; California Desert Wildflowers; California Mountain Wildflowers, and Shore Wildflowers of California, Oregon and Washington** *($2.95 each; University of California Press, Berkeley, CA 94720) All available also from Whole Earth.*

—PW

FLOWER GUIDES BY SIMPLIFIED SYSTEMATIC BOTANY

You don't need the hi-tech vocabulary but you've got to know stamens and pistils. **Flower Finder** *by May T. Watts (75¢; from Nature Study Guild, Box 972, Berkeley, CA 94701) and Harold William Rickett's* **New Field Book of American Wild Flowers.** *(New York: Putnam, 1963).*

—PW

Nightshades

A cozy feeling of plant family. This family is called the Nightshades (peppers, potato, eggplant, tomato, mandrake, tobacco, datura). You eat them, smoke them and see visions through them. I wish every family had as good a scribe as Heiser.

—PW

Nightshades
(The Paradoxical Plants)
Charles B. Heiser
1969; 200pp
$5.95 postpaid
from:
W. H. Freeman & Co.
660 Market Street
San Francisco CA 94104
or Whole Earth

Virginia went tobacco mad. The crop was planted everywhere, and when a field was exhausted, the farmers simply moved to new lands. Although the cultivation was not encouraged by the mother country because of a lack of faith in the future of tobacco and a reluctance to see the colony's economy based on a single crop as well as royal displeasure to the use of tobacco, nothing could stop it. By the end of the seventeenth century as much as 86,000,0 pounds was exported during a year. Tobacco became legal tender in Virginia. Wives were bought for 120 pounds of the leaf. Ministers were paid in it, and naturally became shrewd judges of its quality. Tobacco was denounced from many pulpits, but not from those of Virginia. Many famous Americans were connected with tobacco in one way or another. Both George Washington and Thomas Jefferson were tobacco growers. Patrick Henry won early fame when he successfully defended the colonists against the crown in a suit over the right to use currency instead of tobacco for the payment of debts.

Notes on Making an Herbarium

Forget the museum-stuffiness. Beautifully mounted flowers and grasses are works of art. This pamphlet is solid advice on collecting, drying, materials and mounting.

—PW

Notes on Making an Herbarium
ARNOLDIA
Vol. 28, Nos. 8-9
1968; 42pp.
$1.00 postpaid
from:
The Arnold Arboretum
Jamaica Plain, MA
02130

The Forgotten Art of Growing, Gardening and Cooking with Herbs

This book is for herb lovers, and if you never thought about loving herbs, consider a garden devoted to scent and supplying fresh seasonings for every meal. Seems like a luxury, except herb gardens are low-maintenance and can be stuck in minimal places, outdoors or in. Poor soil is fine, as long as it has good drainage, and intense heat brings more oil into the leaves. The practicality of herbs is described; not in medicines, but in dyes, potpourris and organic pesticides. The chapters on herb cooking are straight forward with easy recipes.

—Carolyn MacDougall

The Forgotten Art of Growing, Gardening and Cooking with Herbs
Richard M. Bacon
1972; 121pp.
$4.00 postpaid
from:
Yankee, Inc.
Dublin, NH 03444
or Whole Earth

Cream Rises
WILD EDIBLE PLANTS

Stalking the Wild Asparagus
East Coast. Portable. **80**

Edible Wild Plants of Eastern North America
East of Great Plains. More technical. Not portable but the best. **80**

Western Edible Wild Plants *West. About 50 species. Portable.* **483**

Edible Native Plants of the Rocky Mountains
Big Version of above. About 175 species. Not portable. Best recipes, etc. **80**

Wild Edible Plants of the Western United States
302 species. Good for Northwest and Southwest too. Portable. **80**

A Modern Herbal *Encyclopaedic.* **58**

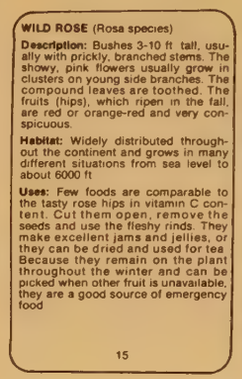
Potter's New Cyclopaedia of Medicinal Herbs and Preparations *For prescribing* **483**

Edible & Poisonous Plant Cards

Handiness incarnate. This pocket-size deck of cards is the best learning-identifying system I've had occasion to use. Clear color photos, succinct description of the plant and its uses or threats.

—SB

Edible & Poisonous Plants of the Eastern States
Edible & Poisonous Plants of the Western States
52 cards each
$4.95 each postpaid
from:
Plant Deck, Inc.
2134 S.W. Wembley Park Rd.
Lake Oswego, OR 97034


WILD ROSE (Rosa species)

Description: Bushes 3-10 ft tall, usually with prickly, branched stems. The showy, pink flowers usually grow in clusters on young side branches. The compound leaves are toothed. The fruits (hips), which ripen in the fall, are red or orange-red and very conspicuous.

Habitat: Widely distributed throughout the continent and grows in many different situations from sea level to about 6000 ft

Uses: Few foods are comparable to the tasty rose hips in vitamin C content. Cut them open, remove the seeds and use the fleshy rinds. They make excellent jams and jellies, or they can be dried and used for tea. Because they remain on the plant throughout the winter and can be picked when other fruit is unavailable, they are a good source of emergency food

15

Potter's New Cyclopaedia of Medicinal Herbs and Preparations

If you think aspirin or ephedrin is an industrial product or never thought about the origins of modern medicines, then this book will cure your ignorance and schizophrenia. Herb stores can't prescribe but you can make some medicines by buying the herbs. Here is exact knowledge: therapy by symptoms; therapy by herbal combinations; ways to prepare infusions, solid extracts, pills and decoctions: At times, astrological. (See also Pg. 739.)

—PW

Potter's New Cyclopaedia of Medicinal Herbs and Preparations
R.W. Wren
1972; 400 pp.
$3.95 postpaid
from:
Harper & Row Gen. Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

OX-EYE DAISY

OX-EYE DAISY — *Chrysanthemum leucanthemum*, Linn. Fam. Compositae

Synonyms: White Daisy, Field Daisy, Moon Daisy, Maudlin Daisy, Great Ox-eye, White Weed, Goldens, Horsegowan, Marguerite, *Leucanthemum vulgare*, Lam.
Habitat: Europe, Great Britain, Russian Asia.
Flowering Time: It starts in the spring and continues for most of the summer.
Description: The leaf stem is angular, 1–2 ft long, bearing stalked, serrate, spatulate leaves in the lower half, with a serrate, clasping base, and serrate upper leaves, which are oblong and sessile. The yellow-centred, white flowerheads have an involucre of green bracts with thin, black, membranous edges. The receptacle is hemispherical and without palease. The fruit has no pappus. Taste, bitter and tingling; odour, faintly valerianic.
Part Used: Herb.
Medicinal Use: Antispasmodic, diuretic, tonic. Ox-eye Daisy has been employed successfully in whooping cough, asthma, and nervous excitability. As a tonic it acts similarly to Chamomile, and has been recommended in nightsweats. The decoction—of usual strength—is taken in wineglassful to teacupful doses three to four times a day. Externally it is serviceable as an injection in leucorrhoea, and as a lotion for ulcers, wounds, etc. Large doses produce emesis.

Wild Food Plants of the Sierra

Very pleasant and chatty—— Indians did this and the USDA said that. You'll need to be able to recognize the plants from another book. O.K. on parts to use and recipes and preparations.

—PW
[Suggested by Terence Eagleton]

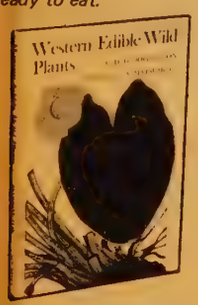
Wild Food Plants of the Sierra
Steven and Mary Thompson
1972; 185pp.
$2.95 postpaid
from:
Dragtooth Press
18423 Carlton Ave.
Castro Valley, CA 94546
or Whole Earth

When the Sierra was inhabited by Indians, they were an important influence in the ecological balance. They kept the deer in check, they gathered great quantities of wild nuts and bulbs and other food plants, and they deliberately set fires to clear out the underbrush and improve conditions for certain food plants. But the Indians were aware of their place in the environment and lived in the Sierra for thousands of years without destroying the beauty. Most significantly, they were aware of the dangers of over-population and practiced birth control. Their medical lore included a number of oral-contraceptive plants. At least one of these species *(Lithospermum ruderale)* has been tested in a modern laboratory and found to suppress ovulation in rats. Regarding food plants, the Indians had a custom of not taking from the first plant of a species one came upon. Rather, one should ask its help in finding more of the same. This custom turns out to be sound conservation practice. And not only does it prevent you from wiping out a solitary specimen, it often leads you to many plants that you otherwise would carelessly have missed.

Western Edible Wild Plants

The portable version of Harrington's text (Pg. 80). Plants are easily identifiable and his advice on parts to eat and preparation is right on. Only drawback is relatively small number of species for such a large area. You won't find too many in one spot all ready to eat.

—PW



Western Edible Wild Plants
H. D. Harrington
1972; 156pp.
$2.95 postpaid
from:
Univ. of New Mexico Press
Albuquerque, NM 87131
or Whole Earth

HERB SUPPLIERS

Page **58** *and page* **129** *lists many sources of herbs, dyes, barks, essential oils & extracts. New sources are listed below:*

Dominion Herb Distributors has changed to:

Wide World Herbs, Ltd.
11 St. Catherine St. East
Montreal 129, Canada

Free catalog for over 2,000 herbs, roots, barks, dyes, etc. Minimum $5 order. Also essential oils, known for its dyes. Retail only.

ATTAR
Smith Village
New Ipswich
New Hampshire 03071

Wholesales and retails high quality culinary herbs, herbal teas, roots and barks (like ginger, kava kava and burdock), herbs with a history of magical potency (like High John the Conqueror), gums and resins (primarily for incense), scented herbs (primarily for sachets and potpourris), herbs for dyeing, essential oils (the botanical essences or "attar" that are used as the base for perfumes) and others. Free catalog.

Kiehl's Pharmacy
109 3rd Ave.
New York, NY 10003

The only botanical pharmacy in the USA. Fine mixtures for asthma or nervousness. Just about everything else you'd expect in a total herb outfit from shampoos to peppermint. Write for catalog.

The Complete Book of Wild Herb, Flower, and Tree Seeds
The Complete Book of Herbal Dyes

The Lanark County North American Medicinal and Culinary Herbs Co.
$1.50 each postpaid
from:
The Lanark County North American Medicinal and Culinary Herb Co.
R.R. 2
Almonte, Ontario, Canada

Both are expensive catalogues of untreated seeds, many of which were grown organically. This Canadian company operates without electricity, but assures a prompt response to U.S. orders.

—RM

LAND USE

The Man Who Planted Hope and Grew Happiness

1913 in Provence. Barren, colorless land. Most villages were abandoned, their springs gone dry. In one village, people made charcoal and it was an unhappy life: greed and rivalry among neighbors, everyone trying to escape the area. Hot, dry winds blew through the treeless landscape, which was turning to desert from lack of vegetation and water.

In the hills, through the valleys, walked a shepherd with his flock. In a bucket each day he carried 100 acorns soaked the night before in water. With an iron rod as thick as your thumb he would poke a hole in the earth, carefully plant the acorn, and walk on. 100 each day. Jean Giono came across the shepherd, Elezard Bouffier when hiking in the Alps that year before WWI. In three years' time the 55-year old man had planted 100,000 acorns. 20,000 had taken, and he expected to lose half of these.

"There remained 10,000 oak trees to grow where nothing had grown before."

Seven years later, Giono returned to the area and went with Bouffier for a walk amongst ten year old oaks, ". . . beech trees as high as my shoulder, spreading out as far as the eye could reach. . ." and birches planted where there was moisture in the valleys. In 1945 Giono returned again:

Everything was changed. Even the air. Instead of the harsh dry winds that used to attack me, a gentle breeze was blowing, laden with scents. A sound like water came from the mountains; it was the wind in the forest; most amazing of all, I heard the actual sound of water falling into a pool. . . . The old streams, fed by the rains and snows that the forest conserves, are flowing again. Their waters have been channeled. On each farm, in groves of maples, fountain pools overflow on to carpets of fresh mint. Little by little the villages have been rebuilt. People from the plains, where land is costly, have settled here, bringing youth, motion, the spirit of adventure. Along the roads you meet hearty men and women, boys and girls who understand laughter and have recovered a taste for picnics. Counting the former population, unrecognizable now that they live in comfort, more than 10,000 people owe their happiness to Elezard Bouffier.

The full story of this apolitical, non-funded, one-person campaign of restoring a landscape and causing streams to flow again is in this pamphlet.

—LK

The Man Who Planted Hope and Grew Happiness
Jean Giono
1967; 16pp.
$0.75 postpaid

from:
Friends of Nature
c/o Miss Ellen R. Riggs
92 Arlington St.
Winchester, MA 01890

Trees for Architecture and the Landscape

An expensive book with rather dull photos, but an excellent, huge list of many types of trees from each state in the back. Trees are classified by height, form (pyramidal, columnar, weeping etc.), blossom (white, pink, red, yellow), by summer and fall color of foliage. Lists of trees for the city—— wide, medium and suburban streets—— and those that tolerate moist or dry soil or resist various pests.

—LK

Trees for Landscaping
Robert L. Zion
1968; 284pp.
$25.00 postpaid

from:
Van Nostrand Reinhold Co.
450 W. 33rd St.
New York, NY 10001

Cream Rises
TREES

Stark Bros., Miller, Gurney *Mail order fruit trees* 56

Trees and Flowers *Bare root, tree seeds* 57

Pruning Handbook *Fruit tree tending* 61

Ben Meadows Forestry and Engineering Supplies Catalog *Planting, tending, cutting tools* 74

Knowing Your Trees *Best black & white guide* 77

Tree finders *Pocket size* 77

Tree Crops *For generations* 485

The International Book of Trees *Gorgeous* 485

Seed and Planting Stock Dealers

If you cannot find the trees you want from the closest state nursery, USDA has published a list of about 150 trees and where to obtain. This list is prepared primarily for seed and planting stock buyers.

—LK

Seed and Planting Stock Dealers
(A directory of dealers that sell the more common forest and shelterbelt seeds and plants)
Forest Service—USDA
May 1972 — Free

from:
Forest Service
U.S. Dept. of Agriculture
Washington, DC 20250

FOREST TREE NURSERIES

BARE ROOT TREES: 3¢ EACH

You can get trees for winter bare root planting in all but five states for as little as $14.00 for 500 trees. The trees come by mail, roots protected by wet sawdust.

Alder, ash, birch, cedar, cypress, fir, pine, hickory, oak, maple, spruce, walnut. . . Best results are from planting trees of local origin: within 100 miles and 1000' of same elevation.

Planting bare root trees, you work quite fast; two people can plant several hundred in half a day. A good community or neighborhood project.

Here is a list of nurseries. Many of the states have instruction booklets on planting, such as the one for Calif.: Planting California Forest Land (free from Calif. Div. of Forestry, Davis Headquarters, 5800 Chiles Rd , Davis, Calif 95616) Out of California ask the local nursery where to obtain planting information.

FOREST TREE NURSERIES IN THE UNITED STATES

For more details request the report on Forest Tree Nurseries from Chief U.S. Forest Service Washington 20250.

ALABAMA

Auburn Nursery
Route 1
Box 136
Opelika, AL
36801

Edward A. Hauss Nurs.
Rt. 3, Box 322
Atmore, AL 36502

John R. Miller Nurs.
Box 248
Autaugaville, AL 36003

Coosa Forest Tree Nurs.
Coosa Pines, AL 35004

ARKANSAS

Baucum Nursery
Rt. 1, Box 515C
Little Rock, AR 72117

Bluff City Nursery
Bluff City, AR 71722

CALIFORNIA

Humboldt Nursery
Arcata, CA 95521

Mt. Shasta Nursery
McCloud, CA 96057

Placerville Nursery
Placerville, CA 95667

Ben Lomond Nursery
13665 Empire Grade
Bonny Doon Route
Santa Cruz, CA 95602

Davis Hdqtrs Forest Nurs.
5800 Chiles Road
Davis, CA 95616

Magalia Nursery
P.O. Box 57
Magalia, CA 95954

Antelope Valley Nursery
Antelope Valley SCD
P.O. Box 392
Lancaster, CA 93534

Henninger Flats Nursery
Box 3009 Terminal Annex
Los Angeles, CA 90054

Ely Meadow Nursery
Southern California Edison
Shaver Lake, CA 93664

Korbel Nursery
Simpson Timber Co.
Korbel, CA 95550

Mill Creek Nursery
Rellim Redwood Co.
P.O. Box 247
Crescent City, CA 95531

COLORADO

Mt. Sopris Nursery
Carbondale, CO 81623

Colorado State Forest Service Nursery
Foothills Campus
Colorado State Univ.
Ft. Collins, CO 80521

CONNECTICUT

Pachaug State Forest Nurs.
Voluntown, CT 06384

DELAWARE

State Tree Nursery
(Nursery at Lindoln, DE)
Drawer D
Dover, DE 19901

FLORIDA

Andrews Nursery
P.O. Box 86
Chiefland, FL 32626

Herren Nursery
Rt. 2, Box 960
Punta Gorda, FL 33950

Munson Nursery
Rt. 1, Box 84
Milton, FL 32570

Buckeye Nursery
(Nursery at Foley, Fla.)
Buckeye Cellulose Corp.
Perry, FL 32347

Colen P. Kelly Nursery
Gilman Paper Company
P.O. Box 52
Day, FL 32013

Container Corp. of America
P.O. Box 129
Archer, FL 32618

Lee Nursery
St. Regis Paper Co.
Lee, FL 32059

Southwood Nursery
St. Joe Paper Company
P.O. Box 191
Tallahassee, FL 32302

GEORGIA

Davisboro Nursery
Route 1
Davisboro, GA 31018

Herty Nursery
2910 Newton Rd.
Albany, GA 31705

Morgan Nursery
Rt. 1
Byron, GA 31008

Page Nursery
Rt. 4
Lyons, GA 30436

Walker Nursery
Star Route
Reidsville, GA 30453

Glenville Nursery
Rt. 2
ITT Rayonier, Inc.
Glenville, GA 30427

Karl Meschke Nursery
Route 1
Jesup, Georgia 31545

Pine Tree Nursery
Box 26
Bellville, GA 30414

Theodore W. Earle Nursery
Statesboro, GA 30458

HAWAII

Central State Nursery
Kamuela, HI 96743

Hilo State Nursery
P.O. Box 1761
Hilo, HI 96720

Kauai State Nursery
Lihue, Kauai, HI 96766

Maui State Nursery
Kahului, Maui, HI 96732

Puuopelo Nursery
Parker Ranch
Kamuela, HI 96743

IDAHO

Coeur d'Alene Nursery
Coeur d'Alene, ID 83814

Lucky Peak
Boise, ID 83702

Forest Nursery
College of Forestry
University of Idaho
Moscow, ID 83843

ILLINOIS

Mason State Nursery
Topeka, IL 61567

Union State Nursery
Route 2
Jonesboro, IL 62952

INDIANA

Jasper-Pulaski State Tree Nursery
Medaryville, IN

Vallonia Nursery
Vallonia, IN 47281

IOWA

State Forest Nursery
2404 South Duff
Ames, IA 50010

KENTUCKY

Kentucky Dam Nursery
P.O. Box 412
Gilbertsville, KY 42044

Morgan County Nursery
Rt 1, Box 85 H
West Liberty, KY 41472

Pennyrile State Nursery
Route 3
Dawson Spring, KY 42408

LOUISIANA

Beauregard Nursery
P.O. Box 83
DeRidder, LA 70634

Columbia Nursery
P.O. Box 647
Columbia, LA 71418

MAINE

State Forest Nursery
(Nursery at Greenbush, ME)
Passadumkeag, ME 04475

MARYLAND

Buckingham Forest Tree Nursery
Harmans, MD 21077

MICHIGAN

Chittenden Nursery
Wellston, MI 49689

J. W. Toumey Nursery
Watersmeet, MI 49969

Southern Michigan Nursery
Howell, MI 48843

Wyman Nursery
Manistique, MI 49854

Newaygo SCD
Croton Road
Fremont, MI 49412

Van Buren SCD
Center Building
Paw Paw, MI 49079

MINNESOTA

Eveleth Nursery
Eveleth, MN 55734

Carlos Avery Nursery
Route 2, Box 144
Forest Lake, MN 55025

Badoura Nursery
Akeley, MN 56433

General Andrews Nursery
Willow River, MN 55795

Blandin Tree Nursery
Blandin Paper Co.
Grand Rapids, MN 55744

Cloquet Forest Tree Nursery
Northwest Paper Co.
Cloquet, MN 55720

MISSISSIPPI

W. W. Ashe Nursery
Brooklyn, MS 39425

Mt. Olive Nursery
Rt. 1, Box 130
Mt. Olive, MS 39119

Waynesboro Nursery
Route 4, Box 96
Waynesboro, MS 39367

Winona Nursery
Route 3
Winona, MS 38967

MISSOURI

George O. White State Forest Nursery
Licking, MO 65542

MONTANA

State Forest Nursery
2705 Spurgin Road
Missoula, MT 59801

J. Hofert Company Nursery
Bigfork, MT 59911

St. Regis Paper Co. Nurs.
Libby, MT 59923

NEBRASKA

Bessey Nursery
Halsey, Nebraska 69142

NEVADA

Nevada State Tree Nurs.
160 Boynton Lane
Reno, Nevada 89502

NEW HAMPSHIRE

State Forest Nursery
(Nursery at Gerrish, NH)
RFD No. 7
Penacook, NH 03301

NEW JERSEY

Washington Crossing State Nursery
Washington Crossing
RR 1, Box 339
Titusville, NJ 08560

NEW YORK

Lowville Tree Nursery
Box 86
Lowville, NY 13367

Saratoga Tree Nursery
R.D. 4, Route 50
Ballston Spa, NY 12020

NORTH CAROLINA

Claridge Nursery
Route 5, Box 540
Goldsboro, NC 27530

Edwards Nursery
Route 3
Morgantown, NC 28655

Griffiths Nursery
Route 2, Box 120
Clayton, NC 27520

Linville River Nursery
Box 70
Crossnore, NC 28616

Riegel Paper Co. Nursery
P.O. Box 1249
Lumberton, NC 28358

Weyerhaeuser Co. Nursery
Route 2, Box 351
Washington, NC 27889

NORTH DAKOTA

Bottineau Nursery
Bottineau, ND 58318

Towner Nursery
Towner, ND 58778

Oakes Nursery SCD
Oakes, ND 58474

Lincoln Nursery SCD
P.O. Box 1601
Bismarck, ND 58501

OHIO

Green Springs State Nursery
Rt 1
Green Springs, OH 44836

Marietta State Nursery
Rt 1
Marietta, OH 45750

Zanesville State Nursery
Rt 5
Zanesville, OH 43701

OKLAHOMA

State Tree Nursery
Route 1
Washington, OK 73093

State Tree Nursery
P.O. Box 596
Broken Bow, OK 74728

OREGON

Bend Nursery
Bend, OR 97701

Dwight L. Phipps Nursery
Elkton, OR 97436

UTAH

Green Canyon State Tree Nursery
1750 E. 1900 N.
North Logan, UT 84321

VERMONT

State Tree Nursery
Essex Junction, VT 05452

VIRGIN ISLANDS

Virgin Islands Forestry Program Nursery
Estate Upper Bethlehem
Kingshill, St. Croix
U.S. Virgin Islands
00850

VIRGINIA

Augusta Forestry Center
P.O. Box 9028
Crimora, VA 24431

New Kent Forestry Center
P.O. Box 305
Providence Forge, VA 23140

Pine Tree Nursery
Continental Can Co.
P.O. Box 340
Hopewell, VA 23860

WASHINGTON

Wind River Nursery
Carson, WA 98610

Mike Webster Forest Nursery
Route 4, Box 493
Olympia, WA 98501

Hofert's Olympia Nursery
Box 88
Olympia, WA 98501

IFA Washington Nursery
Route 2
Evergreen Valley Road
Olympia, WA 98501

Weyerhaeuser Washington Forest Nursery
Route 8, Box 424
Olympia, WA 98501

WEST VIRGINIA

Clements State Tree Nursery
Lakin, WV 25250

Parsons State Forest Nursery
P.O. Box 310
Parsons, WV 26287

WISCONSIN

Boscobel State Nursery
Rt 3, Box 65
Boscobel, WI 53805

Griffith State Nursery
Box 311
Wisconsin Rapids, WI 54494

Hayward State Nursery
Hayward, WI 54843

Hugo Sauer State Nursery
Box 557
Rhinelander, WI 54501

Nepco Lake Nursery
Box 311
Port Edwards, WI 54469

The International Book of Trees

Worth $30? Well, there's no other tree book that covers the whole Earth; no other tree book with such luscious photos; no other tree book arranged so clearly by Tree Families with such easy, accurate captions saying why this *is a locust and* that's *a laburnum. English-oriented, so some fine planting suggestions must be tempered by earlier chapters on what grows where. Maybe it'll be remaindered.*

—PW

[Suggested by Doris Herrick]

The International Book of Trees
Hugh Johnson
1973; 288pp.
$29.95 postpaid
from:
Simon & Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

A traveller should be a botanist, for in all views plants form the chief embellishment.

—Charles Darwin..

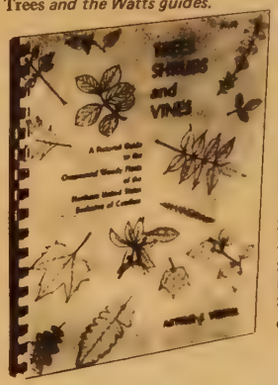
Trees, Shrubs & Vines

A guide I have not tried but looks great is **Trees, Shrubs and Vines**. *Identification is by leaf-shape and arrangement of leaves on the stem. Guide covers all* ornamental *(meaning cultivated as well as most native) species* in the East. *No conifers, but, then again, vines and shrubs.*

The best large book for identification of North American trees is **Knowing Your Trees** *listed on Pg. 77. The Watts series are the easiest* pocket guides *for North American trees (Pg. 77)*

The Peterson Field Guide (No. 11, **A Field Guide to Trees and Shrubs***), is limited to NE and central United States but covers* shrubs *as well as trees. It is more difficult to use and less informative than the combo:* **Know Your Trees** *and the Watts guides.*

—PW

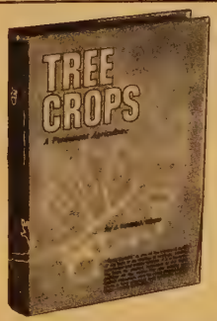


Trees, Shrubs & Vines
Arthur T. Viertel
1970;
$3.95 postpaid
from:
Syracuse Univ. Press
Box 8, University Station
Syracuse, NY 13210
or Whole Earth

Tree Crops

Smith sees trees as a cure for erosion from hillside farming and as a source of food. He has visited and photographed farmers around the world to demonstrate his argument. Many tree species are considered, including oak, chestnut, mulberry, honey locust, persimmon and mesquite. If you are involved with marginal farm land, there are food and livestock crops here you probably never thought of.

—RN



Tree Crops
(A Permanent Agriculture)
J. Russell Smith
1950; 408pp.
$7.95 postpaid
from:
The Devin-Adair Co.
1 Park Ave.
Old Greenwich, CT 06870
or Whole Earth

In place of the Appalachian corn bread, the Corsican has chestnut bread; in place of corn to feed the animals, the Corsican uses dried chestnuts. One of my informants—— the mayor of the village—— took me around to the barn and showed me how his horse relished a feed of dried chestnuts. She crunched them, shells and all, exactly as my horses crunched corn. . . .

Environmental Protection Criteria for Disposal of Treated Sewage on Forest Lands

Give your sewage to the woods—— carefully.

—SB

Environmental Protection Criteria for Disposal of Treated Sewage on Forest Lands
Hugh Cunningham
1971; 34pp. Free
from:
U.S. Forest Service
633 W. Wisconsin Ave.
Milwaukee, Wisc. 53203

Besides reducing the pollutional load on surface water supplies, land disposal, up to a point, can result in stimulation to growth of higher plants, recharge ground water supplies, reuse nutrients that are normally wasted, and provide economical treatment of the waste water.

FORESTRY ASSISTANCE PROGRAMS

The U.S. Department of Agriculture works with the states in assisting private landowners to start, improve, and harvest trees. Under the Agricultural Conservation Program, they'll pay up to 80% of the cost of planting trees and improving young stands. Under other programs, land owners can get help in building ponds, controlling erosion, retaining watersheds, and fire and flood protection. Under the program Loans for Forestry Purposes, loans are made to farmers to buy forest lands, improve timber stands, and improve soil and water conditions.

—LK

General information is in the brochure: **Public Assistance for Forest Landowners, PA-893**; full information in pamphlet: **Forestry Assistance Programs in Cooperation with State Forestry Agencies** (Nov. '72).

From:
Forest Service
U.S. Dept. of Agriculture
Washington, DC 20250

For local information on forestry aid programs, contact (by state, alphabetically):

C. W. Moody, State Forester
Alabama Forestry Comm.
513 Madison Avenue
Montgomery, AL 36104

William A. Sacheck,
State Forester
Division of Lands
Forestry Section
323 E. Fourth Ave.
Anchorage, AK 99501

Andrew L. Bettwy,
State Forester and
State Land Commissioner
State Land Dept.
1624 W. Adams
Phoenix, AZ 85007

Billy G. Gresham
State Forester
Arkansas Forestry Comm.
P.O. Box 4523 Ahser Stn.
Little Rock, AR 72203

Lewis A. Moran,
State Forester
Resources Bldg.
1416 Ninth Street
Sacramento, CA 95814

Thomas B. Borden
State Forester
Colorado State University
Fort Collins, CO 80521

Edmund J. Vandermillen
State Forester
Dept. of Environmental Protection
165 Capitol Ave.
Hartford, CT 06115

Samuel Mace
Manager of Forestry
Div. of Parks, Recreation and Forestry
Wm. Penn and
Legislative Ave.
Dover, DE 19901

Walter F. Gabel
CFM Supervisor
Div. of Production and Promotion
Drawer D
Dover, DE 19901

John M. Bethea, Director
Div. of Forestry
Collins Bldg.
Tallahassee, FL 32304

Arthur Ray Shirley, Dir.
Georgia Forestry Comm.
P.O. Box 819
Macon, GA 31202

Tom K. Tagawa,
State Forester
Hawaii Div. of Forestry
1179 Punchbowl St.
Honolulu, Hawaii 96813

Gordon C. Trombley
Land Commissioner
Dept. of Public Lands
State Capitol Bldg.
Boise, ID 83720

H. F. Siemert,
State Forester
Div. of Forestry
State Office Bldg.
400 S. Spring St.
Springfield, IL 62706

John Datena
State Forester
Div. of Forestry
Room 613
State Office Bldg.
Indianapolis, IN 46204

H. Gene Hertel
State Forester
State Conservation Comm.
300 4th St.
Des Moines, IA 50319

Harold G. Gallaher
State and Extension Forester
Forestry Bldg.
2610 Claflin Road
Manhattan, KS 66502

Harry Nadler, Director
Div. of Forestry
519 Capital Plaza Tower
Frankfort, KY 40601

James E. Mixon
State Forester
Louisiana Forestry Comm.
P.O. Box 15239
Broadview Station
5150 Florida Blvd.
Baton Rouge, LA 70815

Fred E. Holt, Director
Bureau of Forestry
Dept. of Conservation
State Office Bldg.
Augusta, ME 04330

Adna R. Bond, Director
Maryland Forest Svs.
Tawes State Office Bldg.
580 Taylor Ave.
Annapolis, MD 21401

Bruce S. Gullion, Director
Div. of Forests and Parks
100 Cambridge St.
Boston, MA 02202

T. E. Daw, State Forester
Forestry Division
Dept. of Natural Resources
474 Hollister Bldg.
Lansing, MI 48933

Earl Adams, Director
Div. of Forestry
Centennial Office Bldg.
St. Paul, MN 55155

Billy T. Gaddis,
State Forester
Mississippi Forestry Commission
908 Robert E. Lee Bldg.
Jackson, MS 39201

Osal B. Capps
State Forester
Missouri Dept. of Conservation
2901 North Ten Mile Dr.
Jefferson City, MO 65101

Gareth C. Moon
Administrator
Dept. of Natural Resources and Conservation
Div. of Forestry
2705 Spurgin Road
Missoula, MT 59801

Ellsworth H. Benson
State Forester
201 Miller Hall
University of Nebraska
Lincoln, Nebraska 68503

George Zappettini
State Forester
262 West Winnie Lane
Carson City, NV 89701

Theodore Natti, Dir.
Dept. of Resource Development
State House Annex
Concord, NH 03301

Roger Leighton
CFM Supervisor
College of Agriculture
Univ. of New Hampshire
Durham, NH 03824

George R. Moorhead
State Forester and Chief
Bureau of Forestry
P.O. Box 2808
Trenton, NJ 08625

Joseph Truncer, Dir.
Div. of Parks and Forestry
P.O. Box 1889
Trenton, NJ 08625

Manuel A. Ortiz
State Forester
N.M. Dept. of State Forestry
P.O. Box 2167
Santa Fe, NM 87501

James O. Preston, Dir.
Div. of Lands and Forests
Dept. of Environmental Conservation
Albany, NY 12201

Samuel S. Cobb, Dir.
Bureau of Forestry
Dept. of Environmental Resources
P.O. Box 1467
Harrisburg, PA 17120

Alejandro Batista, Dir.
Seed Program
Agricultural Svs. Adminis.
P.O. Box 998
Hato Rey, Puerto Rico 00919

Eric L. Bough,
Horticulturist-in-Charge
Division of Forestry
Kingshill, Virgin Islands 00850

Henry J. Deion, Jr.
State Forester
Div. of Forest Environment
Veteran's Memorial Bldg.
83 Park St.
Providence, RI 02903

John R. Tiller,
State Forester
State Commission of Forestry
P.O. Box 287
Columbia, SC 29202

Millard M. Braden
State Forester
State Office Bldg.
Pierre, SD 57501

Max J. Young
State Forester
Div. of Forestry
Tennessee Dept. of Conservation
2611 West End Ave.
Nashville, TN 37203

Paul R. Kramer, Director
Texas Forest Service
College Station, TX 77843

Ralph C. Winkworth, Dir.
Office of Forest Resources
Dept. of Natural and Economic Resources
P.O. Box 27687
Raleigh, NC 27611

Dr. Robert E. Johnson
State Forester
NDSU-Bottineau Branch
Bottineau, ND 58318

Ernest J. Gebhart, Chief
Div. of Forestry and Preserves
Fountain Square
Columbus, OH 43224

Albert Engstrom, Dir.
Forestry Division
Oklahoma State Dept. of Agriculture
Capitol Bldg.
Oklahoma City, OK 73105

Edward Schroeder
State Forester
2600 State St.
Salem, OR 97310

P. L. Sjoblom
State Forester
1596 W. N. Temple
Salt Lake City, UT 84116

E. Bradford Walker
Director of Forests
Department of Forests and Parks
Montpelier, VT 05602

Wallace F. Custard
State Forester
Virginia Division of Forestry
P.O. Box 3758
Charlottesville, VA 22903

Don L. Fraser, Supervisor
Dept. of Natural Resources
Olympia, WA 98504

Lester McClung
State Forester
West Virginia Dept. of Natural Resources
Division of Forestry
State Office Bldg.
Charleston, WV 25305

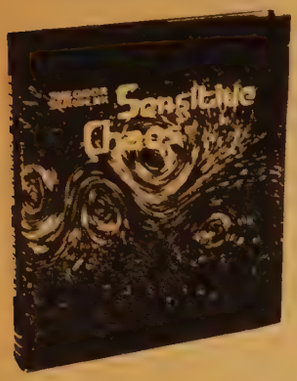
Stanley W. Welsh
Chief State Forester
Dept. of Natural Resources
P.O. Box 450
4610 University Ave.
Madison, WI 53701

Carl E. Johnson
State Forester
Rm 113 Capital Bldg.
Cheyenne, WY 82002

Sensitive Chaos

The ways that flowing forms our heart, cyclones, rivers and bird flight. How we flowed as embryos and our bones still spiral and loop with the markings of past eddy movements. Here is spiritual guidance in the greatest book of Jungian-Taoist natural history.

—PW



Sensitive Chaos
Theodor Schwenk
1965; 147pp
$10.00 postpaid
from:
Anthroposophic Press
258 Hungry Hollow Rd.
Spring Valley, NY
10977
or Whole Earth

Cream Rises
WATER

Water in the Service of Man
Best general intro 72

Sensitive Chaos *Flow forms* 486

Water Supply for Rural Areas & Small Communities
Good & Technical 70

Planning for an Individual Water System
Easiest 486

Beginner's Handbook of Dowsing
Beats guessing 736

Low-Cost Development of Small Waterpower Sites *Good handbook* 68

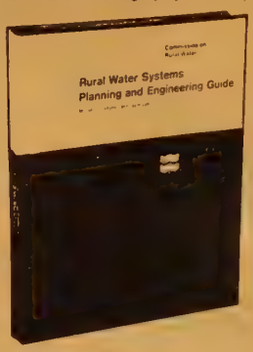
Clean Water
City recycling of sewage 488

Stop the Five-Gallon Flush
Dictionary of Alternative Toilets 487

Rural Water Systems Planning and Engineering Guide

Emphasis on wells, almost exclusively. So if you're into dams and collecting surface runoff—— forget it. On the other hand, the finest introduction and explanation of how to go about designing a community system with wells. Great annotated bibliography.

—PW
[Suggested by Chuck Missar]



Rural Water Systems Planning and Engineering Guide
Michael Campbell and Jay Lehr
1973; 150pp.
$12.50 postpaid
from:
Information Clearing House
221 N. La Salle St.
Chicago, IL 60601
or Whole Earth

There are four ways of obtaining a community water supply in rural areas: (1) tapping and treating raw surface water; (2) purchase of treated surface or ground water; (3) construction of a single high-capacity water well; and (4) construction of several water wells of medium to low capacity. Each method offers its own economic and operational advantages and each must be thoroughly examined before a choice is made. A typical procedure is to compare all sources of available water, their costs, and their inherent limitations.

A key feature of the first three alternatives is that they all involve costs which are likely to be prohibitive for low-income residents. Tapping and treating raw surface water is an expensive operation requiring extensive pumping, piping, and treatment facilities. The monthly cost per customer may not be too great if a very large population will be served and the water system can take advantage of economies of scale. In a rural area with a relatively small population, however, the monthly cost will often be more than many residents can afford.

A small piece of wood circling in a vortex. It constantly points in the same direction

Water around a whirlpool moves in spirals

The ray has assimilated the movement of the waves into its fin movements (after Hesse-Doflein)

The wave behind a stone in a stream remains always at the same place, a lasting form with new water constantly flowing through it, whereas in the stationary water of a lake or sea the form of the wave is transferred in movement across the surface.

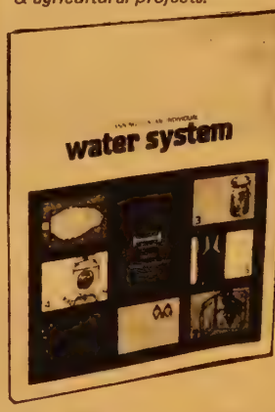
•

Rhythmical waves and flowing currents are two different elements of movment in water, but they can change over into one another or be superimposed one upon the other and work together. Fluid flow can arise through rhythms, and—— as we shall see later—— rhythms can also arise through flow movements. Here again is an important principle which nature applies in the creation of her living creatuires out of the fluid medium. It has for instance been observed that in the hen's egg the inner formative processes in the embryo are accompanied by rhythmical wave movements. These run in a gentle wave of contractions over the amnion of the egg from one end to the other and back. It is a kind of rhythmical to and fro movement which continuously massages and moulds the content of the egg.

Planning for an Individual Water System

This is it. The do-it-yourself, easy to understand, complete guide to individual *water systems. Especially good for the USA where electricity and pumps are available. Fine sections on pump, pipe & electrical installation as well as small livestock & agricultural projects.*

—PW



Planning for an Individual Water System
American Association for Vocational Instructional Materials
1973; 156pp.
$6.95 postpaid
from:
American Association fo Vocational Instructional Materials
Engineering Center
Athens, GA 30602
or Whole Earth

River Ecology and Man

A series of essays giving the sober, intimate judgments of scientists. Amazing, the number of ways a river can be fucked up. Technical writing but, if you have a river you want to protect, the vignettes on the Columbia, Delaware, Illinois, Nile, Thames and Danube will provide solid frames of reference. The chapters on politics are disappointing.

—PW

River Ecology and Man
Ray Oglesby, et. al.
1972; 465pp.
$12.95 postpaid
from:
Academic Press, Inc.
111 Fifth Ave.
New York, NY 10003
or Whole Earth

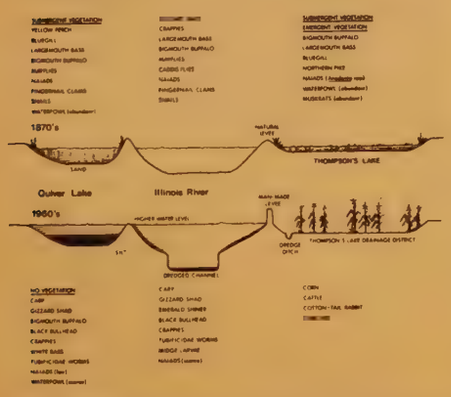


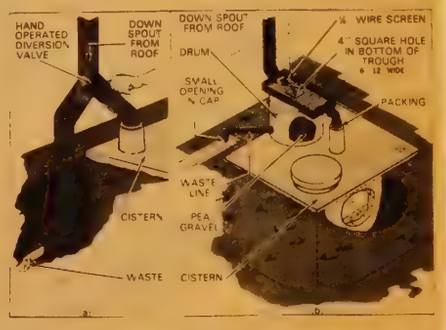
Figure 8. Schematic drawings demonstrating the impact man has had during the past century on the ecology of the Illinois River and two of its adjoining bottomland lakes near Havana (Figure 1)

Community Water Systems Source Book

Here's a hot damn book that you folks ought to know about. He gives tables for friction loss in pipe, resistance of fittings, pipe discharge rates for various sizes at 60 psi, pictures of valves and fittings so you can talk with your friend at Midnite Plumbing Supply intelligently, conversion tables and a biographical sketch of 'ol Joe himself.

—Chuck Missar

Community Water Systems Source Book
Joseph Ameen
1973; 214pp.
$7.50 postpaid
from:
Technical Proceedings
P.O. Box 5041
High Point, NC 27262
or Whole Earth



Methods of roof washing for cistern water. (a) Hand-operated diversion valve used to waste first rainfall. After roof is washed, the valve is changed so water will enter the cistern. (b) Automatic roofwash. The first rainfall flows into the drum. After the drum is filled, the remaining water flows into the cistern. During a period without rainfall, water dripping from the opening in the waste line empties the drum.

BEST RIVER BOOKS

Field Book of Ponds and Streams by Ann Morgan, New York: G. P. Putnam's 1930. $6.95.

Life in Lakes and Rivers by T. T. Macan and E. B. Worthington. Fontana Earth. 1972, paperback $2.25. Fontana.

Streams, Lakes and Ponds by Robert E. Coker. $2.25. Torch TB 586. Harper-Row.

SEPTIC TANKS

Septic tanks are the standard American way to dispose of wastes. They have increased in cost as materials rise in price and have become mechanically baroque in the hands of paranoid health officials. But, they are actually very fine sub-irrigation systems and easier to get past the Health Departments than compost privies.

Septic Tank Practices
Shelter Publications
1974; 50pp.
$2.50 postpaid

from:
Shelter Publications
Box 279
Bolinas, CA 94924

How septic tanks and drainfields operate; ecological problems such as high-water table, impermeable soils, and freezing; new combo techniques of evapo-transpiration beds and sand filters; relation of water use to septic tank functioning, etc. A contemporary handbook to update the ancient ideas of the Public Health Service Manual.

J. T. Winneberger
Septic Tank Consultant
1018 Hearst Ave
Berkeley, CA 94710

A drop-out botanist and the septic tank guru with numerous, available private publications on soils and septic tanks. Can help design whole subdivisions or individual systems in impossible ecologies. A man of far-out honesty living inside a rip-off economy.

—PW

AN URBAN POSSIBILITY

Wherever soil is available, it is obviously the best filter to purify waste water. In cities, soil is asphalt. Vacuum toilets are one way to reduce waste water and consequently reduce treatment costs. In addition, a separate grey water system can recycle easily: for fire protection, industrial cooling, air conditioners, dry cleaning, etc. Envirovac (Water and Waste Management Operations, 701 Lawton Ave., Beloit, Wisconsin 53511) has been claiming an 85% reduction in water use for an average 20 story office building. Each flush uses 3 pints. Another company (Microphor, 452 East Hill Rd., PO Box 490, Willits, CA 95490) produces a similar toilet (uses one quart) more suitable to boats and drought areas. Remember vacuum toilets have many mechanical parts and require an outside (electric) energy source to operate.

—PW

Economics of Water Collection and Waste Recycling

Economics of Water Collection and Waste Recycling
(Working Paper No. 6)
Gerry E. Smith
July 1973; 45pp.
$1.50 plus postage

from:
Technical Research Div.
University of Cambridge
Dept. of Architecture
1 Scroope Terrace
Cambridge, England

This is the technical data that the nitty-gritty energy freaks and conservationists have long awaited. An economic analysis of the relation of water and waste recycling that considers almost every alternative to the flush toilet. Before sewerraging up, get your community to ponder this pamphlet. Costs must be translated from pounds to dollars but the economics are still appropriate.

—PW

The Brick

An American toilet uses between 3 to 6 gallons of good, fresh drinking water with every flush. The most direct way to save water is to stop flushing it away. One brick in the tank above your toilet will displace the water and save you up to a quart on each flush. Two bricks—— if this doesn't interfere with flushing power—— will save you more. Cherry Hill, NJ spent $2,000 on 27,000 bricks. In one year, the council estimates to save 34 million gallons. Cherry Hill has 17,000 homes.

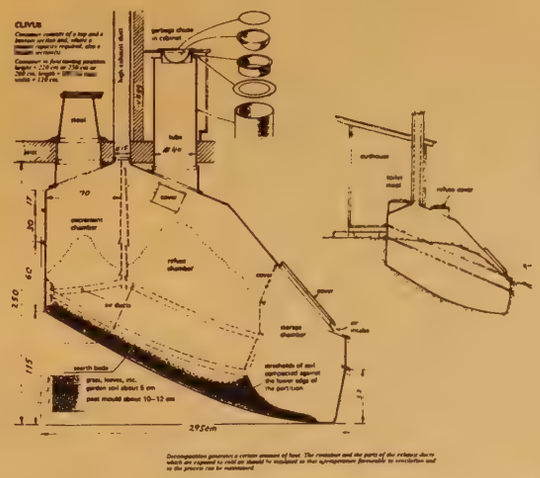
—PW

Excreta Disposal for Rural Areas and Small Communities

On Pg. 70; the best advice for low-tech sanitation.

WATERLESS TOILETS

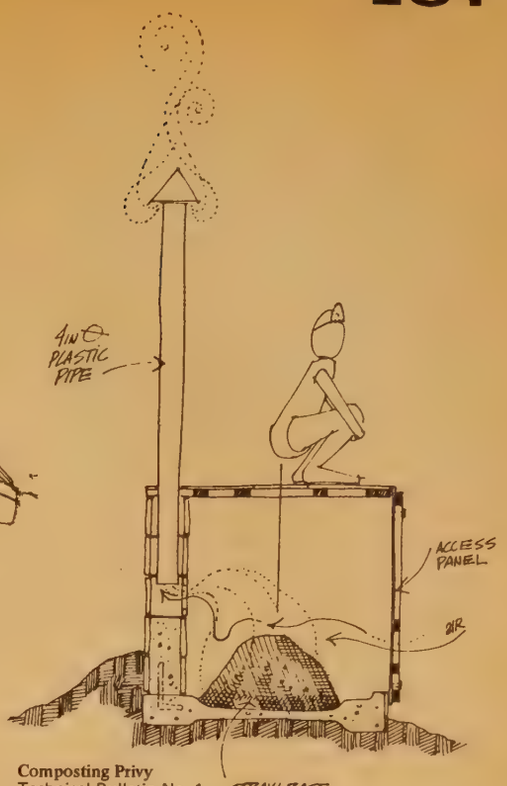
The privy is being revived with new design features that will allow recycling of human wastes as well as acceptance by County and State Health Authorities.



Clivus-Multrum USA
14A Eliot St.
Cambridge, MA 02138

Totally enclosed, fibre-glass compost privy. Digests aerobically through ventilating pipes. Needs Public Health approval in every state but Maine. Needs a grey water system to cover shower and kitchen water. Cost is $1,600 plus toilet (about $60) plus chutes. A beautiful system but not for the poor. Available, at the moment, only in small quantities. Write above.

—PW



Composting Privy
Technical Bulletin No. 1
Farallones Institute
Point Reyes Station, CA 94956
$1.50 plus postage

While the Clivus can be and is used in cities, the Farallones compost privy is basically a rural trip (needs 4' x 8' area). It needs you to turn the pile (a few minutes per month) while the Clivus does the aeration through pipes. But, this is a great design and is much cheaper. Needs grey water system as well as Public Health approval. You build it.

—PW

Stop the Five Gallon Flush!

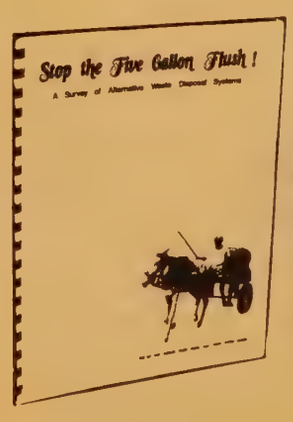
Our mad wastefullness must finally confront the flush toilet: the twentieth century machine that wastes 4 to 5 gallons of drinking water each time you flush and 40% of your household's total water supply each day; the machine whereby our good shit has been libelled as a "waste" and forgotten as a fertilizer; and, most horribly, the cause of huge, gold-cadillac industrial plants that claim to "treat" these wastes but ultimately are so inefficient and expensive that the oceans, bays, estuaries and rivers wind up polluted.

Here is the book that begins to make sense. It asks the right questions: How much water does your toilet use? How much energy (e.g., electricity) is required to provide the water or dispose of the shit?

Does your disposal system recycle any of the water or "waste"? Are there mechanical parts that may break down and add heavy maintenance costs? Is a "grey" water (water from the kitchen or shower that has no shit) system needed as well as a "black" water (water carrying feces) system? How much energy and money does it cost to install and operate both simultaneously?

Stop the Five Gallon Flush! *is one of the crucial books of the seventies. Everything from Destroilets (burns the shit) to Envirovac (sucks the shit with a vacuum pump) to Markt (a freeze toilet) to Pacto 101 (a toilet that packs each "flush" into a sausage-like plastic bag for removal to the dump). After this, a sober analysis.*

—PW



Stop the Five Gallon Flush!
(A Survey of Alternative Waste Disposal Systems)
1973; 60pp.
$2.00 postpaid

from:
Minimum Cost Housing Group
School of Architecture
McGill University
Montreal, Canada
or Whole Earth

The annual water consumption of the average North American family is 88,000 gallons (396 cubic metres), and 40% of this water is used for toilet flushing. The "standard" toilet requires 5-7 gallons (22.5-31.5 litres) for each flushing. A recent experiment at McGill showed that two people, over a one month period, consciously trying to save water, used 200 gallons (900 litres) of water for cooking and washing. In addition to this, using a conventional toilet, they would be forced to use 780 gallons (3510 litres) of water for flushing. Obviously in arid regions, or in areas with dry seasons, or where water supply is critical, the conventional water-borne system is wasteful and costly. Moreover, even where water supply is not a problem, it can be argued that the cost of purifying the water (and sewage is 99.9% water), is the cost of purifying the transporting medium, rather than the waste, and so represents a misuse of energy and resources.

•

MAGIC FLUSH
Manufactured by:
Monogram Industries, Inc.
1165 East 230th St.
Carson, CA 90745
USA

Cost: Not Available

This system is currently being developed and is not yet on the market. An inert, water-white fluid is used with conventional flush toilets. It is absolutely immiscible to human waste, and is readily separated from the waste and used over and over again for flushing. The separated wastes are stored in a small tank for periodic collection by vacuum truck. It is estimated that a 320 gallon tank (1440 litres) will contain the waste of a family of four with semiannual service.

Clean Water

Human shit has been hidden, avoided and tortured as waste. This breezily written book changes "waste" to resource and returns America to the purifying powers of its soils:

> *A teaspoon of living earth contains five million bacteria, twenty million fungi, one million protozoa, and two hundred thousand algae.*

Clean Water *is the first history of sewage farms, land reclamation, and recreational lakes that have used the wastewater, the solids, and the nutrients of human sewage. This is the first book to explain why American sanitary engineers have failed to stop pollution by diluting wastes with our rivers and oceans and/or by building gold-cadillac, high tech treatment plants. Instead of "disposing of wastes," cities and communities could put back our fertilizer into the great Nutrient Cycles of Earth.* **Clean Water** *will save every community and city investigating their sewage problems, months and months of self-education and deliberation.*

Included in **Clean Water***: an explanation of the high tech alternatives (trickling filters, activated sludge, chemical tertiary treatment) and the land-retention alternative; an extensive bibliography and vocabulary needed by all who want to understand the sly sanitary engineer; a discussion of health hazards that distinguishes clearly between true fears and cultural brainwashing; a list of towns using spray-irrigation and land-retention treatment systems throughout the United States, and a list of water pollution control agencies.*

I would like to see an equivalent book on Asiatic methods of wastewater recycling, septic tanks and other homesite treatment systems, and fish culture methods for sewage ponds.

—PW

Clean Water
Leonard A. Stevens
1974; 289pp.
$7.95 postpaid
from:
E. P. Dutton & Co., Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

In the wintertime spraying of sewage effluent moves to Penn State woodlands where the soil can continue to accept water for purification.

Among the so-called contaminants of sewage he [the sanitarian] would immediately recognize some elements essential to gardening, especially nitrates, phosphates, and potash. These compounds, the first two in particular, are widely discussed by sanitary engineers because they are among the most difficult, indeed, nearly impossible ingredients to remove in conventional sewage purification systems, and they are blamed for a lot of today's water pollution. But the compounds are also a holy trinity that good gardeners worship as essential to plant growth.

Land, Private Property Public Control

A Canadian textbook. Its examples of how land ownership forms evolved, did or didn't work; whether primitive tribes, Rome, or contemporary USA, along with philosophical discourses, make it the best I have found to provoke a better understanding of man/land relationships. It is small of print and is tedious at times, but worth reading, especially for those who are into the destiny of community/world landscape.

The working ideas and vocabulary in it unravel a lot of mysteries so that a reader can cope with concepts like leases, land banks, less-than-fee ownership, various taxation approaches, etc., in the reader's private or community land problems.

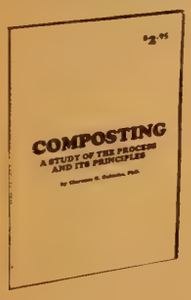
—Huey Johnson

Land, Private Property Public Control
R. W. G. Bryant
1972; 377pp.
$12.50 postpaid
from:
Harvest House Ltd.
4795 St. Catherine St. W.
Montreal H3Z 2B9
Quebec, Canada

Every society must establish its own equilibrium between private rights and social responsibilities. Perhaps equilibrium is not quite the correct term. There is a broad zone of interaction between private and public interests. Even within the general framework of Western democracy, the line of demarcation within this broad zone varies enormously as between Sweden and Texas. In the Netherlands, for example, it is normal and acceptable for the public authorities to intervene in the use and disposition of land, to an extent that would be considered unthinkable in the United States—— yet both are democratic countries in the generally accepted sense of that term. . . . In the United States habits of thought dating from the days of the expanding frontier, and the concomitant notion that space is limitless are still extant. To a degree, the persistence of this outmoded

Composting

By the time the 30 of us had lived two years in the mountains, we'd tained our creek water with hepatitis and a handful of lesser dysentery diseases. Our friend Redwood showed up with Gotaas' book **Composting** *(Pg. 70) which he said was published by the World Health Organization for underdeveloped villages with problems of sanitation and soil fertility. We bypassed the detailed chapter on small scale methane digesters in favor of open air composting of human and barnyard manure. Within a year the water was safe to drink, the gardens were flourishing, the County Health Department was off our back and Redwood went to Ecuador.*



Composting
(A Study of the Process and its Principles)
Clarence G. Golueke
1972; 110pp.
$2.95 postpaid
from:
Rodale Press, Inc.
Book Division
Emmaus, PA 18049
or Whole Earth

Rodale's **The Complete Book of Composting** *is much more agriculturally oriented than the other two, including the 14-day compost method (which always took us 3 or 4 weeks) and detailed discussions of every imaginable sort of compostable garbage from seaweed to sewage sludge. This book includes lots of the hometown "Personal Experience" articles that Rodale books always use when any other writer would be reduced to a footnote. Thank you Rodale, for teaching that all of us are scientists.*

Composting, A Study of the Process and its Principles *is urban-oriented, although the basics of composting are the same whether your interest is sanitation, gardening or solid waste management. Golueke, one of the giants in the field, attacks the myth that composting would be a cure-all for city garbage disposal—— only half of city garbage will break down—— but compares it favorably with incineration and earth-fill. This book is the ideal primer to understanding or designing a municipal compost operation, large or small.*

—Malcolm Terence

Fire Fighting Equipment

Dear Epilog People —
Something I very seldom hear back-to-the-landers talk about is fire safety. Sometimes forest and brush fires are good, sometimes they are bad, but most always they should be optional. Fighting them requires skill and stamina and good equipment. I can't help on the former two, but on the latter I'd like to suggest Western Fire Equipment Co.

The company got started back in the 1880's when Robert Orr made fire fighting tools out of old saw mill blades. Over the years they have developed a complete line of fire fighting tools. Most everything they sell meets U.S. Forest Service specs. Their equipment is expensive and well made.

Western Fire is not geared for walk-in retail trade, but if you are by their office/warehouse and know that you need a double bit brush hook, a heavy duty fire swatter, a backpack fire pump or other hardware like that, stop by and they will sell you one. Don't send for a catalog unless you're in a position to buy a lot of stuff. Call them if you need to find an order number or price for a specific item. When you go in, tell them your friend in the Forest Service sent you—— the FS is one of Western's biggest customers. Better yet, ask your local Forest Service people what they think about Western's equipment before you invest. The FS might also be able to help you intelligently determine your real fire safety needs.

Western Fire Equipment Co.
440 Valley Drive
Brisbane, CA 94005

Peace,
Chuck Missar
Menlo Park, CA

Aquaculture

If you're interested in vastly increasing your protein production, this is the Bible. Every kind of fish, lobsters, shrimps, seaweeds. If it can be grown in water, there's a chapter. Plus, a great appendix on pond siting and construction. Your library can get it for $37.50. Co-Author McLarney is one of the Cape Cod New Alchemists (Pg. 180*).*

—PW
[Suggested by John Todd]

Aquatic animals possess a number of advantages for use in husbandry. Since the body density of fish and swimming crustaceans is nearly the same as that of the water they inhabit, they are spared the chore of supporting their weight, and thus may devote more food energy to growth than terrestrial animals. In addition, fish and invertebrates, being cold-blooded animals, expend no energy on thermoregulation. (Tuna and other fast swimmers are an exception here.) This property would further enhance their potential growth rate, which is far more plastic than that of higher vertebrates. Russian sources aver that accumulation of flesh in the body of carp, per unit of assimilated food, is one and one-half times as rapid as in swine or chickens and twice as rapid as in cattle or sheep.

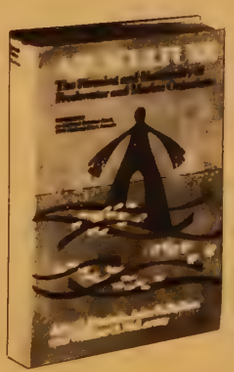
•

Advantages of small ponds

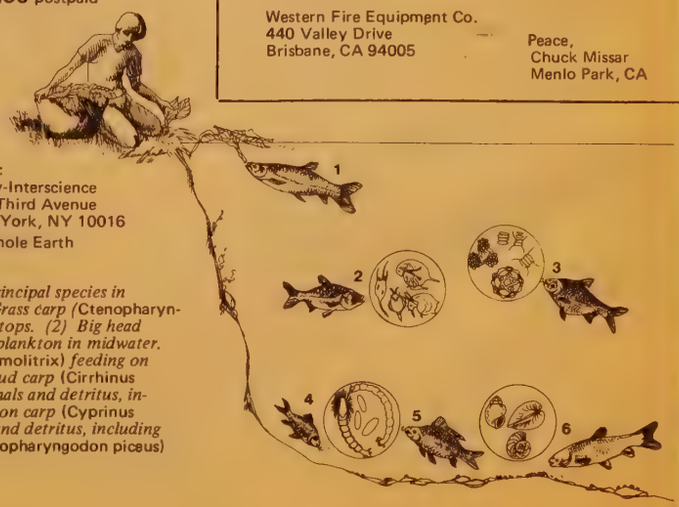
1. Easier and quicker to harvest.
2. Can be drained and refilled more quickly.
3. Easier to treat disease and parasites.
4. If for any reason all or part of the stock in one pond is lost, it represents less of a financial loss.
5. Less subject to dam and levee erosion by wind.

Advantages of large ponds

1. Less construction cost per acre of water.
2. Take up less space per acre of water.
3. More subject to wind action, therefore less susceptible to oxygen deficiency.
4. More conducive to rotation with rice or terrestrial crops.



Aquaculture
John Bardach, et. al.
1972; 868pp.
$37.50 postpaid
from:
Wiley-Interscience
605 Third Avenue
New York, NY 10016
or Whole Earth

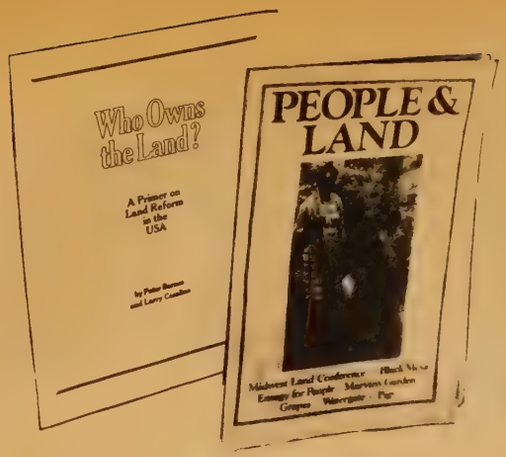


*Habitat and feeding niches of the principal species in classical Chinese carp culture. (1) Grass carp (*Ctenopharyngodon idellus*) feeding on vegetable tops. (2) Big head (*Aristichtys nobilis*) feeding on zooplankton in midwater. (3) Silver carp (*hypophthalmichtys molitrix*) feeding on phytoplankton in midwater. (4) Mud carp (*Cirrhinus molitorella*) feeding on benthic animals and detritus, including grass carp feces. (5) Common carp (*Cyprinus carpio*) feeding on benthic animals and detritus, including grass carp feces. (6) Black carp (*Mylopharyngodon piceus*) feeding on mollusks.*

People & Land

The agricultural conscience of the USA. Trying to get the small farmer a big break; get ag-biz to follow the law; get city housewives some better quality food; give rural Americans a better education on techno-agricultural, land tenure, tax reform, and Jeffersonian democracy. **People & Land** *is the most exciting compendium of farm, food, and land news to be published. The Woody Guthrie tradition resurrected in newspaper format. If you eat, then read* **People and Land** *(50¢ per copy or $10 membership or free if you've committed yourself to the land reform movement.)*

The Center also publishes pamphlets and will publish a book on Land Reform in the near future. The gist of Rural Studies thought can be read in **Who Owns the Land? A Primer on Land Reform in the USA** *by Peter Barnes and Larry Casalino (65¢ postpaid: bulk rates available). There are many, many more right-on pamphlets.*



A land trust seeks to take land permanently off the market. It operates on the principle that land can be used and cared for but not owned; that those who live on a piece of land are its stewards, its trustees; that when they die off or move off the land it passes to another steward. Usually Land Trusts are formed by non-profit organizations in which the land is deeded eternally to the Trust—– not to the individuals occupying the land. Many land trusts have been formed with a great diversity of goals and legal arrangements—– all have broken the real estate speculator's bludgeon. Write the Center for a list of land trusts now in existence.

—PW

Center for Rural Studies
345 Franklin St.
San Francisco, CA 94102

Alfred De La Cruz, Gabriel Martinez, Gelacio Medina, Ana-Leticia De La Fuente and their families decided last year to go into farming on their own. They had lots of farming experience, but very little capital and no land.

They pooled their savings to make a downpayment on 40 acres of land. But they needed more cash to complete the payments, purchase equipment, level the land and install a well. So they leased a separate plot of five acres and began planting cherry tomatoes. A $5,000 loan from the West Side Planning Group, a community economic development corporation, enabled them to buy seedlings, stakes, and other supplies needed for the tomato venture.

Throughout the summer and fall, the members of the co-op worked on their own five acres as well as for wages on other nearby farms. They not only produced a beautiful cherry tomato crop; they succeeded in timing it so that their harvest occurred when the prices were highest. Their gross for the year was over $80,000.

mental climate is very largely responsible for the difficulties experienced by the U.S.A. in adapting its forms of government to modern requirements, and in developing effective means of controlling development, other than the basically crude and clumsy device of the zoning by-law.

•

Stockholm now owns an area greater than the administrative area of the city, approximately 61,750 acres, of which 10,000 are within the city limits. Much of this land is leased to private developers or housing co-operatives, on building leases of between 50 and 75 years. Most of the post-war development has taken place on city-owned land, by various organisations working on land leased from the city. This is the key to the dynamic and successful execution of the Stockholm metropolitan plan, and in this respect Sweden is a long way ahead of North America. Where the city wishes to have a green belt or a forest reserve, the land can be protected from development without paying ransom to speculators. And "cluster" development, at relatively high densities, keyed in with the transit system, is undertaken without the sort of arguments that characterise North American zoning procedures. The cluster satellites are built where it is judged best to build them, in accordance with the master plan, not simply where this or that landowner wishes to develop, and can get his land zoned accordingly. The whole procedure is so infinitely more effective in producing an agreeable and convenient environment than is common in North America, that it deserves careful study, as a model; and municipal ownership is the key.

2

TONGUE FU MEETS HIS MOTHER

In a funky mid-Manhattan apartment, a dignified grey-haired woman in a nurse's uniform is dusting her Tiffany kerosene lamp. She is waiting for a visit from her son. She hasn't seen him since he was an infant.

Outside, the pace on this Friday afternoon is restless. Tongue Fu observes people rushing along the sidewalk only to stand on line for a bus. A traffic light signals *Don't Walk*, and he is bypassed by citizens hurrying frantically across the street.

"When the sign says *Do Not Walk*," Tongue Fu remarks to a hot chestnuts vendor on the corner, "it is perceived as *Run*."

"It don't say *Do Not*, it says *Don't*, can'tcha read English, buddy?"

"Yes. But I do not ever use contractions."

"Oh, yeah? Why don'tcha?"

The traffic light signals *Walk*. Tongue Fu smiles at the hot chestnuts vendor and shrugs his shoulders as he steps off the curb. When he reaches the other side of the street, he sees a metal tab in the gutter, discarded from the top of a soda pop can. He automatically picks it up....

Flashiebackie:

Walking along the beach, Say When Daddy steps on a jagged piece of glass, broken off from a Coca-Cola bottle. Wincing, he draws young Tongue Fu's attention to it.

"Did you not take notice of this object," the blind old man asks, "that which now causes my foot to bleed so profusely onto the sand?"

"I am sorry, master."

"No, do not apologize. But you cannot attain true inner peace without practicing responsibility. You must walk along this beach each morning and pick up whatever might prove dangerous to someone else."

"How long must I continue to practice such responsibility?"

"Until you find yourself doing so without being aware any longer of the reason."

"But suppose I am the only one to do this?"

"Why, then, Anteater, you should be pleased, for that will show you have no ulterior motive, such as wanting something in return. You shall learn how to maintain conscious innocence."

"How is it possible for innocence to be conscious?"

"Isn't that a bitch?" replies Say When Daddy, applying a tourniquet to his wounded foot.

"Is that not a bitch?" repeats young Tongue Fu....

"Because of the length of my tongue," he is now telling his mother what he didn't tell the hot chestnuts vendor, "I have had to learn to speak very carefully. So that it will not show."

"My only obligation is to explain the circumstances which brought about your abnormal tongue. I promised your father that, before I left Japan. During World War Two, he was a volunteer Kamikaze pilot. They had all been trained in mysticism. It was necessary for them not to be concerned about death. Not when the premeditated loss of their own lives– in the process of destroying an American aircraft carrier– would save so many other Japanese lives.

"However, in 1945, there were those among their leaders preparing to surrender. Nevertheless, Japanese intelligence agents discovered that the United States had so much invested in developing the atomic bomb that they had to be dropped. Say When Daddy's suicide mission was to prevent those planes from ever taking off. But his plane was shot down first.

"He survived, except for his eyesight. His flying goggles had melted into his eyeballs. I was an Air Force nurse at the time, and I happened to be assigned to his case. He was so ashamed to find himself alive in an enemy hospital that Hara-kiri seemed to be his only alternative.

"Well, it was as though I had become a personification of the life force, overshadowing even the urge of his spiritual conditioning. And so you were conceived one night in an American hospital bed somewhere between Hiroshima and Nagasaki."

The tea kettle boiling on the stove whistles at such a high pitch that one of the teacups breaks. Tongue Fu's mother pours the tea into two other cups.

"Nine months later," she sighs with tortured regret, "I was nursing you for the first time. And your tongue... unreeled ... around my nipple. I went into shock. The doctors said your condition was a result of atomic fallout affecting the genes.

"Forgive me, my son, but I had to flee. I just couldn't bear to give suckle even a second time to this... freak. So I left you with your father in a monastery.

"I returned here. Met a nice man. Got married. Gave birth to a normal daughter. Eventually got divorced... and am settled in my life. I work at a hospital; I have my friends.

"The last I heard of your half-sister, she was pregnant and unmarried, in that order. We don't have much contact. She's a disciple of some guru. Here's her picture. Now please go. It's the kindest thing you can do."

In a slight state of confusion, Tongue Fu wanders along Broadway.

He goes into a dilapidated arcade with a sign in front that says AMUSEMENT CENTER. He stumbles past the mechanical Gypsy Lady in an isolation booth waiting to tell his fortune. Past the steering wheel that would permit him to drive down an obstacle-filled revolving road. Past the machine that he could stand on to have his feet vibrated. Past the miniature hockey game. Past the little metal prizefighters ready to go into action at the drop of a coin.

He finally stops at an anti-aircraft gun. Faded lettering invites him to *Bomb the Japs Off the Map!* "Not still," he mumbles and walks out determinedly. Chinning himself easily up over the entrance, with his tongue snapping out again and again like a secret organic weapon, he selectively destroys certain letters in the word AMUSEMENT so that now the sign in front reads SEMEN CENTER.

In the window, a display of rubber masks resembling show business and political celebrities all stare unseeingly at the strangeness of his performance, with the exception of Jacqueline Kennedy Onassis, who winks at him.

[Continued, page **489***]*

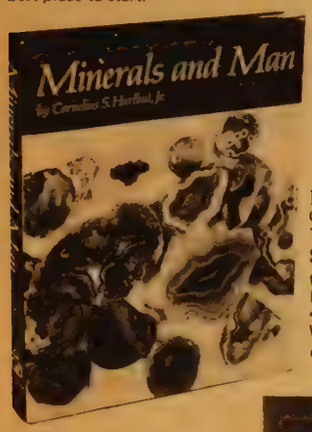
LAND USE

Minerals and Man

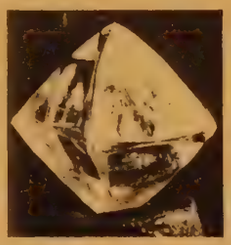
Get it straight. Organic means containing Carbon. Inorganic means no Carbon and usually a substance formed *before life began on Earth. Oil and pearls are organic—— and therefore* not *mineral. Asbestos (a "cloth") and brimstone (a rock that burns) are minerals. Any more questions?* **Minerals and Man** *has sumptuous photographs, easy prose, and particularly excellent descriptions connecting man's use of and need for the inorganic world. There should be maps and maybe a section on "endangered" species of minerals. But, this is the best expensive introduction.*

There is no good field guide or easy path to identification of minerals. Hurlbut's edition of Dana's Manual of Minerology *(1971; $16.95 postpaid, from: John Wiley & Sons, Inc. 605 Third Ave., New York, NY 10016) is the best place to start.*

—PW



Minerals and Man
Cornelius S. Hurlbut
1970; 304pp.
$17.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

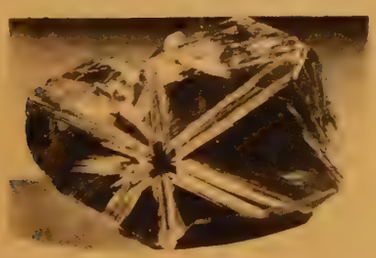


A transparent octahedral diamond crystal from the Kimberley Mine, South Africa.

Before the manufacture of glass, one of the chief uses of muscovite was as window panes. "Books" of mica could be split into clear, thin sheets and then trimmed to the appropriate size. One can still see windows in old palaces in India glazed with muscovite that let in the light and keep out the cold winds today as effectively as they did when they were constructed. This white mica was mined in Muscovy (the early name for Russia) for this purpose and was called Muscovy glass; hence the name of the mineral. After the advent of glass for house windows, the chief use for muscovite was as windows in furnaces and heating stoves where it was necessary for the window to be both transparent and heat resistant. At this time it was usually referred to by the German term, *Eisenglas*, corrupted in English ti "isinglass." Although today sheet mica is still used for furnace windows, the demand is small. The greatest consumption is by the electrical industry in punched forms for radio tubes, for winding electrical resistance elements, and for high-grade capacitors. Sheet mica for such purposes is becoming increasingly rare and sells for high prices—— from a few dollars to seventy-five dollars a pound. Because of the enlarging demand and the dwindling supply of high-grade mica, synthesis of sheet mica is being actively carried out and may bring new life to the industry.

•

During the metamorphism of the limestone that gave rise, geologically, to rubies, other minerals including spinel were also formed. Spinel, like diamond, commonly occurs in octahedral crystals and this enables the trained eye to distinguish them from the hexagonal crystals of ruby. However, the red transparent variety, called "ruby-spinel," if not in crystals so strongly resembles ruby that the two minerals have long been confused. A famous gem stone, the "Black Prince's Ruby" was determined to be a spinel long after it was set in the English crown. Undoubtedly many other "rubies" in fine pieces of jewelry are in fact spinel.



Needle-like crystals of rutile from Minas Gerais, Brazil, oriented by the structure of the colorless quartz in which they are enclosed, form a six-pointed star.

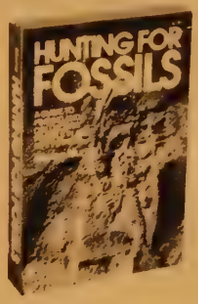
Cream Rises
GEOLOGY

Geology Illustrated *Landforms alive* 10
Minerals and Man *Fascinating coffee table* 490
Natural Regions of the United States *The big neighborhoods* 475
Hunting for Fossils *Rock biology* 490
Miners Catalog *Collection gear* 73
Handbook for Prospectors *Collection technique* 667

Hunting for Fossils

Murray's book is a good practical introduction to the various sites available around this country; her information seems to be fairly current and accurate (as opposed to, say, Ransom's Fossils in America, *much of which I found to be outdated). The emphasis is on the big vertebrates; she covers the dramatic dinosaur localities and primitive mammal finds in the Western states in some detail. My major gripe is that some of the Eastern areas are sketchily dealt with; for instance, there's but the briefest of references to the fine world-famous Calvert Cliffs locality in Maryland. All in all, though, there's a good deal of solid information including some valuable directions on the process of bone excavation, jacketing, and preparation; did you know you can get special freight rates for boxes labeled "fossils in rock"?*

—Bill Gallagher



Hunting for Fossils
Miriam Murray
1967; 348pp.
$2.95 postpaid
from:
Collier Books
Macmillan Pub. Co.
Order Dept.
Front and Brown Sts.
Riverside, NJ 08075
or Whole Earth

All of us who have had a hand in creating this book have done so with the clear knowledge that the person who pokes around looking for fossils without really knowing what he is doing is at best a nuisance and often a menace to serious paleontologists. Most of the scientists would be much happier if uninformed amateurs would stay out of the way, and often say so.

Paleontologists in Utah cried out in anguish in November 1965, when irresponsible hunters went into a very important dig the scientists had left unfinished and messed the whole thing up. As a result, to hunt fossils in Utah one must have both a state and a county permit, and there is a heavy fine for infringement. It is interesting to note also that a committee was appointed in Utah in 1966 to cooperate with the American Geological Institute and the Department of the Interior in a nonschool education program. In New York, one must have a permit to dig near any state highway. Several other states have similar laws, and additional states will undoubtedly follow suit, but (as Utah realized) laws about permits will not be enough.

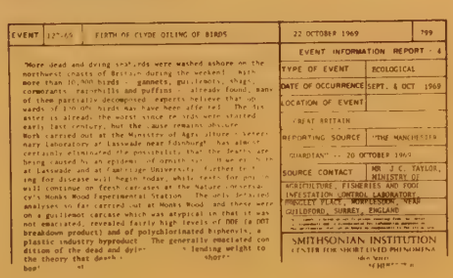
Widespread dissemination of information may well be the answer.

Center for Short-Lived Phenomena

$15 per year. A global Alert system for earthquakes, oil spills, meteorite showers, discovery of stone-using humans, squirrel invasions, and other weird events. You get weekly current event index cards, summary reports, and interesting booklets. One of the great Bio-Happenings!

—PW

Smithsonian Institution
Center for Short-Lived Phenomena
60 Garden Street
Cambridge, MA 02138
Telephone 617-864-7910


EVENT 127-69 FIRTH OF CLYDE OILING OF BIRDS
22 OCTOBER 1969 799
EVENT INFORMATION REPORT - 4
TYPE OF EVENT: ECOLOGICAL
DATE OF OCCURRENCE: SEPT. & OCT 1969
LOCATION OF EVENT:
GREAT BRITAIN
REPORTING SOURCE: "THE MANCHESTER GUARDIAN" -- 20 OCTOBER 1969
SOURCE CONTACT: MR J.C. TAYLOR, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD INFESTATION CONTROL LABORATORY, WOOLEY PLACE, WOKING SURREY, GUILDFORD, SURREY, ENGLAND
SMITHSONIAN INSTITUTION CENTER FOR SHORT-LIVED PHENOMENA

Topsoil and Civilization

In the beginning, there was no soil. Plants have made the soil over millions of years, and civilized man has been destroying it for a few thousand. This book examines the ancient civilizations and explains why so many of the ruins are located in what are now deserts. Two final chapters deal with the United States.

—RN

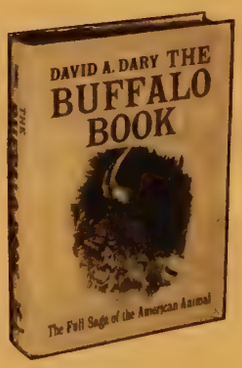
Topsoil and Civilization
Vernon Gill Carter and Tom Dale
1974 (rev. ed.); 292pp.
$2.95 postpaid
from:
Sales Office
Univ. of Oklahoma Press
1005 Asp Ave
Norman, OK 73069
or Whole Earth

Lake Ballinger, Texas, lived 22 years. Its maximum depth was about 35 feet. The watershed which supplied the runoff and the silt consisted of 462 square miles of gently rolling terrain, much of it cultivated. The lake was used as a city water supply by Ballinger until 1952, by which time erosion had made the investment a total loss. Not only that, but there is in the lake bed the equivalent of one square mile of topsoil six inches deep.

The Buffalo Book

It was the U.S. strategy of killing off the buffalo that made possible the conquest of Indian civilization. This buffalo history dates mostly from the white man's contact with the beast, but that alone is a dramatic chunk. For guilt-free animal interest, it scores with the better chimp and dolphin books. Some details for raising your own buffalo herd.

—RM



The Buffalo Book
David A. Dary
1974; 361 pp.
$15.00 postpaid
from:
Swallow Press, Inc.
1139 S. Wabash Ave.
Chicago, IL 60605
or Whole Earth

Houck spoke of another advantage buffalo have over cattle: "They don't take as much feed to put on weight, as they forage some weeds that cattle pass up. That's why three buffalo can live on range that would support only two cows."

•

Buffalo bones stacked at the Michigan Carbon Works in Detroit, 1880s.

Hauling soil back up the hill. These French farmers haul the soil from the bottom furrow to the top of the field each winter. This helps compensate for the downhill movement of soil by erosion.

Most of the progressive and dynamic civilizations of mankind started on new land—— on land that had not been the center of a former civilization. Each civilization flourished and grew for a few centuries on the land that gave it birth. The people who evolved it became more and more civilized during this period of growth. Then they found that their native land would no longer support them, so they began to conquer and take the land of some of their neighbors. With the new land thus acquired, they held their gains in civilization for a few more centuries. After they reached their limits of conquest, their civilization began to decline. Eventually it was engulfed by the surrounding barbarians, and a dark age ensued. After that, a new civilization arose on new land among some of the semicivilized barbarians. Then the pattern was repeated.

This veiw shows the twentieth-century ruins of Palmyra, Syria, once known as the "Queen City of the East" and a rival of Rome as a capital city for the eastern half of the Roman Empire. The small village, in the right background, properly represents the productivity of the land today.

Buffalo, like most other big-game animals, thrive best where not closely confined. Large, open, grass pastures with a plentiful supply of clean, fresh water are best adapted to their needs. Although shade may not be an absolute survival requirement, herds may spend many mid-summer hours in the shade where available. Also, the presence of trees or large rocks adds to their well-being by providing rubbing sites.

Fences for confining buffalo should be strongly constructed. Minimum recommended fencing consists of 47" (Style No. 1047-6-11 or No. 1047-6-9) woven wire set about 10" above ground level extending to the top of 7' heavy duty posts spaced not more than 1 rod apart. Under normal conditions, buffalo are not likely to test the fence very severely, but when excited they may charge blindly into it, and then even the strongest fences may fail.

Corrals and chutes should be made of planks or heavy poles so the animals can readily see them and tend to avoid them. Such fences also obscure the view of activities outside the corral and thus reduce disturbance within. Plank corrals are easy for a man to climb, a distinct advantage when he is seeking escape from excited animals.

Barbed wire should not be used in buffalo fences. The barbs are ineffective in deterring the animals from attempting to escape and are a source of injury and infection. The range should be kept free of all loose wire, nails, etc. to prevent injury or infection.

Regardless of the extent of handling and of apparent domestication, buffalo are *dangerous wild animals* of uncertain temperament and should never be trusted. Supposedly tame animals have attacked owners caught off guard. *Buffalo are not suitable for pets or mascots.*

Ropes should not be used around the neck of the buffalo because the windpipe is easily crushed by such a form of restraint.

Boy feeds a buffalo calf belonging to Pawnee Bill's herd, c. 1915. Note the cow on right with raised tail, a sign that a buffalo is getting angry. Courtesy Division of Manuscripts, University of Oklahoma Library.

American Association for Vocational Instructional Materials

AAVIM publishes over twenty different paperback titles dealing with the mechanical side of farming. They are ideal for first-time farmers because they begin with the basics, and include step-by-step procedures for maintenance and repairs. The book on Field Mowers is particularly thorough.

—RN
[Suggested by Henry Esbenshade]

Publications

Tractor Tune-Up & Service Spec., $4.95
Select. & Storing Fuels & Lub., $3.45
Tractor Operation & Daily Care, $5.45
Tractor Maint. Prin. & Proced., $6.45
Tractor Transmissions, $1.75
Tractor Elec. System, $2.75
Small Engines, Vol. I, $6.95
Small Engines, Vol. II, $8.95
Hydraulics—Vol. I, $3.95
Hydraulics—Vol. II, $4.95
Field Mowers, $4.25
Grounds Keeping, Vol. I, $3.95
How Electric Mtrs. S & R, $2.75
Maint. the L. and W. System, $3.95
Electric Motors - Sel., Prot., Drs., $3.25
Understanding Elec. and Electrical Terms, $2.45
Planning Machinery Protection, $2.25
Farm Utility Building, $3.75
Planning Farm Fences, $2.25
Building Fences, $3.95
Planning for an Irrigation System $6.75
Planning an Individual Water System, $6.95
Ball & Roller Bearings, $1.25
Understanding Horsepower, $3.95

Write:
AAVIM, Engineering Center
Athens, GA 30602, or
Call 404-542-2586

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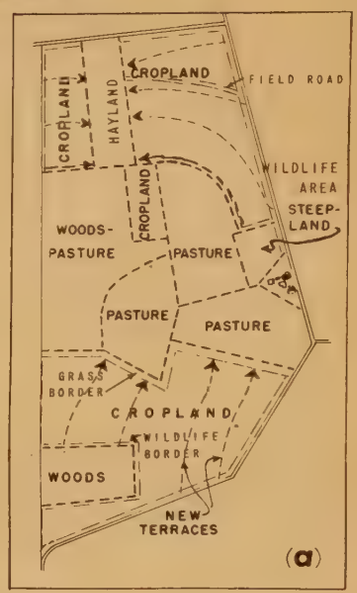
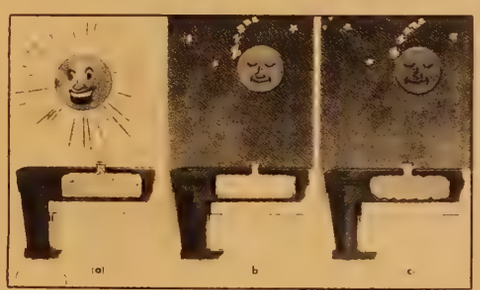
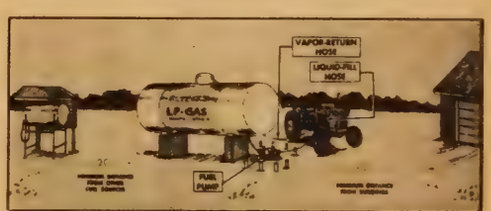
Figure 52. Relative position of a guard and its parts to the cutter bar.



Lay out your fields to fit your land-capability. Fences should be planned parallel to the waterways and on the pasture or wood-area side of the waterway.



How a fuel tank collects moisture. (a) Warm moist air replaces gasoline used from fuel tank. (b) As air cools moisture deposits on side of tank and runs into fuel. (c) If fuel tank is filled immediately after tractor is used, there is no room for moist air.



Minimum distances an LP-Gas tank should be from a major building and from a tank containing flammable liquid such as gasoline. Note posts around fuel pump to help protect pump and tank connections from accidental damage.

Mail Order Chicks

Whole Earth People:

Would like to recommend:

Murray McMurray Hatchery
Webster City, Iowa 50595

Many kinds of chicks both plain and fancy, great service, a catalog that's an education in itself, good prices (it was cheaper for us here in N. Idaho to pay air mail postage than to order locally and selection is so much better), and fine chickens. We ordered a bar-b-que special that grew so fast we butchered at 8½ weeks and had chickens (dressed) average 3-3/4 lbs. each! They also respond quickly to questions—— we got an individual reply to ours in less than a week.

Sincerely,
Daryl Ann Kyle
Athol, Idaho

Dwarfed Fruit Trees

If you like fruit trees, you'll love this book. There is important information on dwarf and standard fruit trees, including lore and a thorough description of each type of dwarfing root stock for all the different kinds of fruit trees. There is even a chapter on site and micro-climate. The book is beautifully printed, and written in a very personal style. Tukey writes to help you become a fruit tree grower, either as a backyard enthusiast, an orchardist, or anything in between.

—Steve Kaffka

Note: The original stocks of this book are now depleted, and unless Macmillan gets some orders, it will go out of print. Write to their editorial offices to register your concern.

—RN

Macmillan Pub. Co., Inc.
866 Third Ave.
New York, NY 10022

The World of the Soil

An excursion through an amazing world by a scientist who explains the obvious with style and without condescension. The references are to English soils but the principles apply everywhere. Few experts write about their subjects with as much brevity and clarity.

—RN

The World of the Soil
Sir E. John Russell
1957; 237pp.
$1.95 postpaid
from:
Fontana Paperbacks
c/o Watts, Franklin Inc.
845 Third Ave.
New York, NY 10022
or Whole Earth

The chinks and crannies riddling the soil appear extremely minute to us and it seems incredible that any air could enter. But everything in Nature is relative: the molecules of oxygen are vastly smaller: crevices only 1/1000 of an inch wide, and far too small for us to see, are as large compared with an oxygen molecule as a valley about 120 miles wide in comparison with a man. For a proper appreciation of the soil one must try to see things as they would appear to its smallest inhabitants if they had the power of sight.

•

. . . during a year a bullock leaves in its faeces enough food to support an insect population of at least one fifth of its own weight, to say nothing of the bacteria, fungi, protozoa, nematodes and other organisms that also participate.

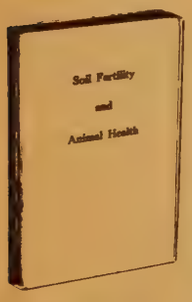
•

Potassic fertilizers came much later into use than the phosphatic and nitrogenous; nineteenth century farmers hardly knew them. The old system of agriculture and the Rules of Good Husbandry that dominated the leases conserved the supplies of potassium in the soil. . . Hay and straw both contain considerable quantities of potassium: their sale off the farm was generally forbidden to tenant farmers; they were consumed by the farm animals and most of the potassium got into the excreta (chiefly the urine) and was returned to the land in the farmyard manure which was then usually richer than it is now. Changes in agricultural systems and complete removal of all restrictions on sales of produce have drastically altered the position.

Soil Fertility and Animal Health

Though this book is about growing better livestock feed, its perspective is ecological and its information is useful to any agriculturalist who ranks quality ahead of quantity. "You are what you eat" is more than a cliché; it is a cycle that begins with the soil.

—RN



Soil Fertility and Animal Health
Dr. Wm. A. Albrecht
1958; 232pp.
$4.00 postpaid
from:
Acres, USA
Box 1456
Kansas City, MO
64141
or Whole Earth

The weanling rabbits had the same pedigree, so did the crop plants making up the hay, but treatment of the soil with some extra fertility to grow better feed made the rabbit on the bottom different in appearance and body structure as the bones also illustrate.

Weeds, Guardians of the Soil

Cocannouer explains how weeds help the soil and crops, when grown in a controlled way, by their deep roots which bring up minerals from the subsoil. They also help shallow-rooted crops (most cultivated crops are) get to deep water; and they conserve the soil, improve its texture, and are good to eat. Written in an anecdotal style containing much good information.

—Stuart Ambler

Our common weeds, possessing vigorous root systems, go down into the lower soils for a goodly portion of their mineral foods because the minerals which plants require are usually abundant down there. Being strong feeders, the weed roots take up great quantities of the minerals and then bring them up to be stored in the stems and leaves. So, when the weeds were burned on the garden, those minerals were deposited there in the ashes, ready to be taken up easily by the growing vegetables. In this manner—— and in many other ways—— weeds are Nature's *true guardians of the soil*. They

Weeds, Guardians of the Soil
Joseph A. Cocannouer
1950; 179pp.
$4.95 postpaid
from:
The Devin-Adair Co., Inc.
One Park Ave.
Old Greenwich, CT 06870
or Whole Earth

are the farmer's friends when he uses them intelligently; often his friends though he fights them.

Generally, the "weeds" in this book are the same old enemies of my boyhood. They were enemies then because I had not yet learned their worth. Grass is not included herein since grass does not improve the soil in the same way as do these deep foraging weeds; the deep-rooted herbaceous dicots. They are annuals usually, though a few biennials and fewer perennials are also reliable soil builders.

Near the top of the list I place pigweeds, two or three strains, and lamb's quarter, both familiar throughout the country in garden and field. Under most conditions these weeds are beneficial to the crop with which they may be growing. The same can be said for some of the nightshades, the ground cherry, and succulent purslane. Even some of the noxious weeds, like the cocklebur and bull nettle, are soil improvers where the individual plants have ample room for full root development.

•

Soils, like dwelling houses, need an occasional overall cleansing, no matter how fertile the land may be. As stated elsewhere, toxins or toxic substances often get into the soil, either through running the same crop on the land for a long period of time, or as the by-products left from organic decay, or through poor tillage practices. Wherever vigorous bacteria are abundantly present, as they always are in a normal soil, some toxic substances may result from their work. These substances are not food materials, and though not harmful to some crops they can be more or less injurious to others.

Where such situations obtain, a mixed crop of deep-foraging weeds will do a good job of cleansing. Exactly how the weed roots do it is not clear. But heavy weed fallowing has been known to have a markedly beneficial effect on toxic soils. Whether the weeds transform the toxic materials, or merely distribute them so as to make them less harmful, I am not certain. But I am certain that weeds, handled properly, will both purify land and enrich it at the same time.

The Nature and Properties of Soils

A college text on soil science. The writing is clear, there is a glossary of terms, and the section headings make it easy to find the information you want quickly. More facts than most people need, but well worth consulting on specific subjects.

—RN

It has been recognized for centuries that certain crops, such as the clovers, alfalfa, peas, beans, and others, improve the soil. . . Within the last century the benefit has been traced to the fixation of nitrogen through the agency of bacteria contained in nodules on the roots of certain host plants. Most of the specific plants so affected belong to the family of legumes although a significant number of nonlegume species are nodulated. The legume organisms live in the root nodules, take free nitrogen from the soil air, and synthesize it into complex forms. . . The organism is a *rhizobium* and there are a number of strains, depending on the host plants. They may, therefore, be classified according to the host as *Rhizobium meliloti* for those of alfalfa and sweet clover, *Rhizobium trifolii* for the clovers, *Rhizobium japonicum* for soybeans, and so on. . . The organisms from one species of legumes are not necessarily well adapted to the ready production of effective nodules on other leguminous species. Certain cross-inoculations are successful in practice, however. . . A partial listing of the groups within which cross inoculation may easily be made follows:

Group 1. (Alfalfa group) Alfalfa, bur clovers, white, yellow and hubam sweet clovers, fenugreek, yellow trefoil, and others.

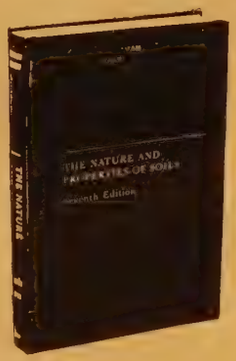
Group 2. (Clover group) Mammoth and red clover, alsike clover, crimson clover, hop clover, white clover, zigzag clover, ladino clover, and others.

Group 3. (Cowpea group) Lespedezas, acacia, kudzu, cowpea, peanut, partridge pea, jack bean, velvet bean, lima bean, etc.

Group 4. (Pea and vetch group) Garden pea, sweet pea, horse bean, lentil, Canada field pea, hairy vetch, common vetch, purple vetch, etc.

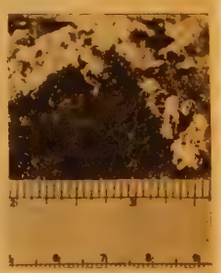
Group 5. (Soybean group) All varieties of soybeans.

Group 6. (Bean group) Garden bean (numerous varieties) pinto bean, and scarlet runner.



The Nature and Properties of Soils
Harry O. Buckman &
Nyle C. Brady
7th Ed, 1969; 653pp.
$11.95 postpaid
from:
The Macmillan Company
866 Third Ave.
New York, NY 10022
or Whole Earth

Group 7. (Lupine group) Lupine, serradella, blue lupine, yellow lupine and white lupine.



Left. A white "alkali" spot in a field of alfalfa under irrigation. Because of upward capillarity and evaporation, salts have been brought to the surface where they have accumulated in amounts toxic to plants. (U.S. Soil Conservation Service photo.) Right. A close-up photo showing the white salt crust on a saline soil from Colorado. The white salts are in contrast with the darker colored soil (left foreground) underneath. (Scale in inches is shown at the bottom of photo.)

Acres, U.S.A.

Acres, U.S.A. is on the cutting edge of the movement away from chemical farming and back to organic methods—— what it calls "eco-agriculture." It has tremendous political significance because it speaks the language of the straight, conservative farmer. Its concern for the environment, the health of the soil and of man is based on economics, not morality—— a crucial distinction between Acres and the Rodale Press. Left-liberal environmentalists who find themselves always talking only to each other should be reading Acres; it embodies the missing populist, anti-big business, anti-USDA spectrum that is right-of-center. For instance, it is the only journal I know of that is documenting the effect that the federal Occupational Safety and Health Act (OSHA) is having on the small farmer. Acres deserves a wide audience..

—RN

Acres, U.S.A.
$5.00 ($6.00 Canadian)/yr, monthly. $.60/copy
from:
Acres, U.S.A.
10227 East 61st St.
Raytown, MO 64133

Richard Ruskamp switched to eco-farming in 1969. Like many farmers in the United States, he'd lost his way. Production was falling, and earthworms had all but disappeared from the scene, the scene being his Nebraska acres in Dodge County. The people who convinced Ruskamp talked about making the natural nitrogen cycle work, about using mild natural fertilizers, mostly about getting the farm back in tune with the Creator's plan. In tune, they argued, inputs would fall to minimum, and production would at least keep pace with production touted by chemical amateurs.

Richard Ruskamp switched. He figured he had to. Under the acidic fertilizer system, production fell off. And corn was still hanging in there at little more than a dollar a bushel.

There were withdrawal pains, and 60 to 80 bushels accompanied that syndrome. But as the rhythm of rotation fell into full swing, production climbed back, reaching 120 bushels an acre.

His son was about to seek another profession. The performance of eco-farming has caused him to change his mind. Farm life means something again, now that the tractor cab doesn't have to stay closed because of all the toxic genetic chemicals.

•

In the U.S., farm alcohol was stamped out ruthlessly, both in Nebraska before WWII, and everywhere after WWII.

Indeed, the farmer ought to grow his own tractor fuel, just as he ought to grow his own protein and fix his own nitrogen.

•

One of the most important cultural practices is the planting of blackberry patches near the vineyard. There is a certain parasite, called *Anagrus*, which is effective against leaf hoppers. However, this parasite overwinters only in blackberries, where it parasitizes another species of leaf hopper. If enough blackberries are present to harbor substantial numbers of *Anagrus* parasites, then leaf hopper damage will be nearly eliminated.

These parasites available from:

Rincon-Vitova Insectaries, Inc.
P.O. Box A
Rialto, CA 92376

•

We can think of at least three rules that should never be broken: One, never march into Russia. Two, never get involved in a land war in Asia. Three, never permit your general farm organization to sue its members.

CALIFORNIA ALERT

California's FDA and Department of Agriculture is trying to get passage of Regulation No. 2774.5—— the use of dried animal waste products as feed. Head honcho in fielding the drive is Harold Ford of Southeastern Poultry and Egg Association. Objective is to put DPW (Dried Poultry Waste) into the bellies of cattle, sheep and laying hens.

The animal waste products proposal is vulnerable. Its best chances ride with the ability of the "efficiency boys" in keeping it from the public. Nader could help on this one. So can college kids, radio stations. News suppression is the name of the game on this one.

The USDA objective, of course, is to sell more soybeans overseas, then feed animals their own excreta. The whole thing smacks of soylent green. And it reminds one of I.G. Farben's stunt with war prisoners—— feeding them on synthetic meals until they passed over the hill a few months later.

Talk about perversion, in California they hydrolyze feathers and waste from animal slaughter plants. It's called phosphoric acid system—— or the K-system. Through

phosphoric acid pickling and chemical neutralization, it's possible to break feathers, bone and all down to basic amino acids (unless the experts are missing some part of the Creator's plans, as did I.G. Farben). They think it works. It has been proposed for dead bird disposal (arsenicals and all). And for bird disposal when prices are low. The product is selling at 25 cents a pound to the pet food industry. One wonders—— if they'll use waste, dead birds, animal offal, is it far down the road before someone thinks of the K-system for dead people disposal? All in quest for protein, the holy grail of nutrition.

•

Scientists at Penn State and Cornell universities have discovered a grasshopper which is secreting a protective froth of spray that contains man-made chemicals.

Dr. Lawrence Hendry of Penn State said the grasshopper has managed to incorporate the powerful new ingredient into its own defense mechanism. . . "It's a little like equipping a skunk with Mace," said Hendry. . . .he and three colleagues from Cornell made the discovery while studying the defensive froth of a 4 to 5 inch long lightless grasshopper, *Romanica microptera*. The froth's odor drives away enemies.

"We found the usual range of gaseous components common to froths, clouds and other defensive sprays.

"But when we isolated 2,5 dichlorophenol we were astounded.

"That compound is not found in nature. We could only speculate that the grasshopper gleaned it from fields by chemically processing another man-made compound, 2,4-D, a common commercial herbicide.

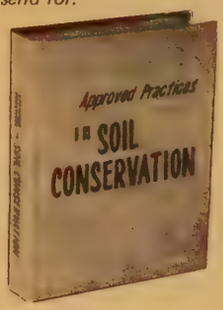
Hendry said grasshoppers taken from fields where no 2,4-D had been sprayed showed no 2,5 dichlorophenol. . . .He added, "over a short time period, the grasshopper has managed to latch on to a man-made chemical for its own purpose. It is not very pleasant to speculate what might happen after a wide variety of hard chemicals have been in common use for 100 years."

•

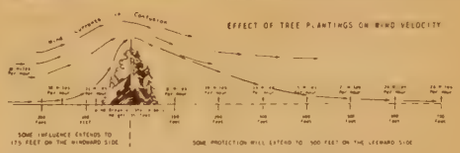
Approved Practices in Soil Conservation

How to control erosion from wind and water. Very complete—— contouring, drainage, pond construction, shelterbelts, wildlife management. Many of the procedures assume you have access to a tractor and implements. Foster worked for the U.S. Soil Conservation Service, and much of the information is compiled from government pamphlets. They are usually referenced in the text, so you can use this book in a library to find which ones you want to send for.

—RN



Approved Practices in Soil Conservation
Albert B. Foster
1964; 497pp.
$8.50 postpaid
from:
The Interstate Printers & Publishers, Inc.
19-27 N. Jackson St.
Danville, IL 61832
or Whole Earth



The first step in contour farming is to establish a contour guide line that runs across the field almost at a constant level. All planting or farming operations will be done from this guide line. . . .Two people are needed—— one to use the level and one to be the target on which to take a sight and set the stakes. Equipment may consist of a hand level or a small carpenter's level mounted on a T-shaped stick of light weight. . . . In locating the first contour guide line on a slope, the usual practice is to go to the highest point in the field and then walk straight down the general slope from this point a distance of from 80 to 100 feet, depending on the steepness of the slope. . . .After the location of the first guide line has been selected, a stake is set and leveling is started from that position. With the levelman at the starting point, the helper paces 50 to 100 feet across the slope, staying approximately on the contour. The levelman directs the helper up or down the slope until he is on the same level or contour as the levelman. The helper sets a stake at this position and the levelman moves to the second stake, the helper moving another 50 to 100 feet across the slope. This procedure is continued until the line crosses the field.

Vegetation and Soils

The best way to use this book is choose a locale you are familiar with (redwood forest, southeastern pitch pine, saguaro desert). Then, look the locale up in the index and start reading about all the other areas of the world that are like the locale you know. My interest spreads—— like looking up etymologies of words. Eyre could have put the maps up front and had more and better maps but for a world picture, this synthesizes vegetation, soils, climate and human settlement better than any other book I'm acquainted with. Academic writing.

—PW

Vegetation and Soils
(A World Picture)
S.R. Eyre
1963; 328pp.
$8.95 postpaid
from:
Aldine Publishing Co.
529 S. Wabash
Chicago, IL 60605
or Whole Earth

Coniferous trees vary a great deal from species to species in the demands they make upon the soil for mineral nutrients. Generally speaking, however, they are much less demanding in this respect than are most broadleaved trees. In particular most species of pine require very little mineral material and are thus able to thrive on very poor, sandy soils. Consequently pines normally dominate on sandy glacial outwash, which is of such frequent occurrence in Sweden and Finland, as well as on sandstone, quartzite and acid igneous rocks on the Laurentian and Scandinavian Shields. Since the pine trees abstract little mineral material from the soil, the vegetable debris which they return to the soil must also be very deficient in this respect and the humus resulting from the partial decomposition of it will be a very acid *mor* or *raw humus*.

LAND USE

Grow It!

Far more useful than **Five Acres and Independence** *a book that took many people back to the land in the 30's.* **Grow It!** *thoroughly covers the operations of any small organic farm from pruning to goat cheese making to pond stocking. No subject is glossed over, and there's more help on gardening than in many gardening books. With it, a first time farmer can start farming, or anyone thinking of buying a farm can get excited.*

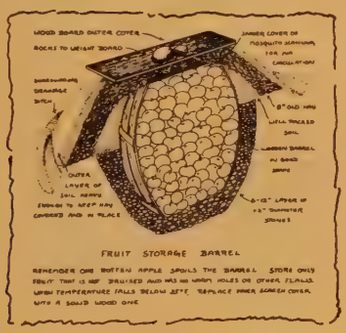
—RM

Grow It!
Richard W. Langer
1972; 365pp.
$3.95 postpaid
from:
Avon Books
250 W. 55th St.
Order Dept.
8th Floor
New York, NY 10019
or Whole Earth

The fundamentals of crop rotation can be listed quite simply, as follows:

1. The area for each crop should be about the same and the demarcation of the fields should remain constant over the years.
2. The whole cycle should contain at least one legume, one deeprooted crop such as alfalfa, and one sod-building crop.
3. When possible, have an extra field in your rotation, or on the sidelines, so to speak. Keep this field in a pasture crop for two to four years, then reenter it into rotation with the grain crop. The field most recently used for the grain crop is then given over to the pasture crop for the same number of years.
4. By using one field for pasture, rather than cutting all the forage and hauling it to the barn, manure will be delivered directly to the field by the grazing livestock. This will assure maximum utilization of the manure, particularly the urine.

Strip farming and contour plowing may not be necessary on your field. Crop rotation always is. And although the lay of your land might not permit you to follow the above plan exactly, the closer you come to the ideal, the better your results. Sit down and plan your crops before you plow and plant.



Alternative Agriculture

One of the best— and often free— sources of information on growing foodstuffs is your local county agent in the Agricultural Extension office— for materials on everything from preparing the land, the selecting and nurturing of crop or livestock, to processing or marketing what you produce. The other major source is the public information office of the College of Agriculture in your state. Write them and find out who the local county agricultural resource person is, and ask them for a catalogue of all the publications they have available to the public on agriculture.

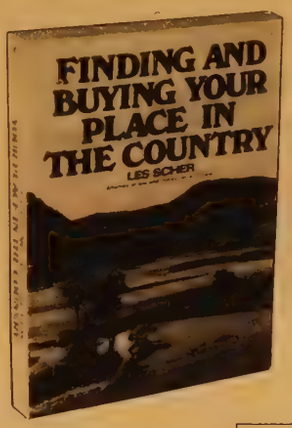
If you don't have luck getting what you want from the Agricultural Extension office or the College of Agriculture, get in touch with the Alternative Agricultural Resources Project people at the University of California at Davis. They're in touch with resources and groups working on alternatives to the current food system, and are interested in ways in which the land grant college system can respond more effectively to the thrust of those practicing alternative agriculture. Right now, they're putting together a source book that includes ongoing activities and contacts of people into land reform and land trust, resident family farming, ecologically sound agricultural management, food cooperatives, energy conserving technology, public accountability research, and lessons to be learned on subsistence from the Third World. Contact: Alternative Agricultural Resources Project, c/o Isao Fujimoto, Department of Applied Behavioral Sciences, University of California, Davis, California 95616.

Sincerely,
Isao Fujimoto
Davis, CA

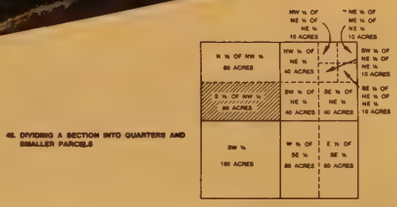
Finding and Buying Your Place in the Country

I'm glad somebody finally wrote this book, and did it so thoroughly. Scher is a lawyer who manages to wade with you through the waters of easements, zoning, taxes, contracts, deeds of trust, mortgages and escrow without muddying them up. Also advice on evaluating property— soil, water, structures, and on bargaining strategies. If you study this book, there is no excuse for being "taken."

—RN



Finding and Buying Your Place In The Country
Les Scher
1974; 393pp.
$6.95 postpaid
from:
Collier Books
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

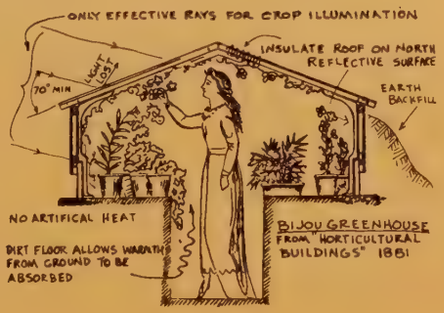


The Owner-Built Homestead

Not only is this good, clear (and the best) single source of information for the homestead builder, but it's good reading. As in his immensely useful **The Owner-Built Home** *(Pg. 94) Ken Kern has digested, selected and condensed from a huge amount of material, and presents his findings in an attempt to show people how to "bridge the gap between primitive inability and a wholesome use of science, technique, and civilization."*

—Lloyd Kahn

The Owner-Built Homestead
Ken Kern
1974; 210pp.
$5.00 postpaid
from:
Owner-Built Publications
Box 550
Oakhurst, CA 93644
or Whole Earth



Farming for Self-Sufficiency

The Seymours have been working at self-sufficiency long enough that they can write about it with wit. If you are new on the land, you can spare yourself a lot of grief and wasted energy with this book. Lots of old country lore and husbandry techniques. Even a recipe for homemade beer. This is not a book for vegetarians.

—RN

Farming for Self-Sufficiency
(Independence on a 5-acre Farm)
John & Sally Seymour
1973;250pp.
$7.50 postpaid
from:
Schocken Books
200 Madison Ave.
New York, NY 10016
or Whole Earth

(In Great Briatin, the title is simply **Self-Sufficiency,** *the publisher is Faber and Faber, 3 Queen Square, London, and the price is £2.95 net.)*

For the last eighteen years Sally and I have been probably as nearly self-supporting with food as any family in northwest Europe. We have a very good idea of what it is like and what it involves, and therefore I feel qualified here to utter a solemn warning.

It is beyond the capabilities of any couple, comfortably, to try to do what we have attempted. If a married couple settled down on five or ten acres of good land, in the British climate, and devoted their entire time to being self-supporting in food, clothes and artifacts; and if they knew how to do it, and had the necessary stock and equipment, already paid for, they could succeed. They would be working just the fifteen hours a day, three hundred and sixty five days of the year, that is, if they were to maintain the standard of living, and variety of food and of living, that they could maintain in a town. They would be very *healthy* doing this, they would not be *bored* (because they would never be doing the same job for long and would be doing a great variety of tasks), but they might sometimes wish they could sit down. . . . Whenever we have been near another 'self-supporter' we have immediately found our task lightened considerably. We could share tools and equipment, 'know-how' (I apologize for borrowing a word from the culture that I have opted out of), and partially specialize: for example, trade asparagus for globe artichokes, mutton for salt fish, pottery for wooden vessels.

This, you may say, is the beginning of specialization, and the beginning of the road back to Birmingham. I do not think it need be. I believe that if half a dozen families were to decide to be partially self-supporting, and settle within a few miles of each other, and *knew what they were doing*, they could make for themselves a very good life.

•

Growing a variety of crops, and keeping a variety of animals, is more *fun*. (That is the most important thing of all.) Secondly, because it is better for the soil: each crop takes something different out of it, the pests and diseases of each crop die of starvation the next year when another crop occupies that piece of ground, the plants feed the animals and the animals feed the plants, for the two kingdoms to which these creatures belong are completely complementary.

•

The world can support a certain number of vegetarians, but for reasons that I shall now set forth I don't believe it can support a population which is all, or nearly all, of this persuasion. The non-vegan vegetarian I think we can discount, that is if he is a vegetarian on moral or ethical grounds alone. If he just doesn't eat meat because he doesn't like it that is his own business entirely: after all plenty of people don't like boiled turnip and nobody else worries about it. But the man who takes a high moral attitude about not eating meat, and eats eggs, drinks milk or eats butter or cheese, wears shoe leather or wool, just does not have to be taken seriously at all. A cow won't give milk unless she has a calf every year, and every other calf she has, on average, is going to be a bull. What do you do with the bull? Let it starve to death or feed it until it dies of old age? If you do the latter your five acres soon aren't going to be supporting anything else except bulls— and it won't support them for long. We have only to go to the parts of Hindu India where they really don't kill cattle, and have no export outlet for them, to see what happens there. The children starve while walking hat-racks wander about picking up any bit of stick they can eat and eventually provide the vultures with poor pickings indeed. . . As for the vegan (a vegan will eat no milk or eggs besides, of course, no meat), a vegan world cannot really suffer any large animals to live at all. If I become a vegan what would I do with the two sows I have got in my sty now? Do I feed them until they die of old age— not letting them breed of course? Or do I turn them loose to roam the roads and get what living they can? If I do that somebody's crops are going to suffer— if enough people do it there won't be any crops left at all. Man has a part to play in the balance of nature, and if he fails to play it that balance gets off-balance and nobody benefits at all.

Cream Rises
FARMING

Grow It! *How-to for small farmers* **494**

Finding and Buying Your Place In the Country
The best on land-buying **494**

Farming for Self-Sufficiency
British experience **494**

Acres, U.S.A.
Eco-agriculture **493**

The Owner-Built Homestead
Plan before building **494**

The Hive and the Honeybee
Best on bees **496**

First Lessons in Beekeeping *Good intro* **496**

The World of the Soil *Best intro* **492**

AAVIM *Best introductory farming details* **491**

Hard Tomatoes, Hard Times

America's Land Grant College Complex, potentially one of the greatest tools ever devised for the small farmer, no longer serves him. **Hard Tomatoes** *tells why. The Complex has become a corporate domain while farmers are going bankrupt by the thousands. This book was of interest to Congress and will be to anyone concerned about the future of small farming.*

–RM

Hard Tomatoes, Hard Times
Jim Hightower
1972; 268pp.
$4.95 postpaid
from:
Schenkman Publishing Co.
3 Mt. Auburn Pl.
Harvard Square
Cambridge, MA 02138
or Whole Earth

Farmers of Forty Centuries

The great book, reviewed on Pg. **46**, *is now back in print. Thank you Rodale.*

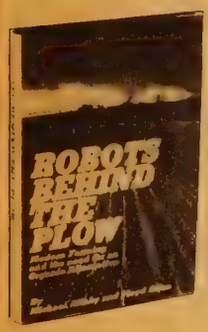
–RM

Farmers of Forty Centuries
F. H. King
1911; 441pp.
$7.95 postpaid
from:
Rodale Press, Inc.
Book Div.
33 East Minor
Emmaus, PA 18049
or Whole Earth

Robots Behind the Plow

A brief assessment of where big farming is at, why it can't go on as it is, and what can be done instead. Written in a clear, compelling style that even your mom and dad (especially moms and dads) will understand. To my mind, this is one of the finest books Rodale has ever published.

–RN



Robots Behind the Plow
(Modern Farming and the Need for an Organic Alternative)
Michael Allaby and Floyd Allen
1974; 182pp.
$6.95 postpaid
from:
Rodale Press, Inc.
Book Div.
33 East Minor
Emmaus, PA 18049
or Whole Earth

Land grant colleges and agribusiness are related directly through the graduation each year of thousands of students who are trained to meet the needs of agribusiness and who are educated to accept the futuristic vision of a programmed and automated agriculture. "We don't teach Cotton Pickin' 102 anymore," beamed Dr. Ty Timm, director of Texas A&M University's agricultural economics department. Indeed they do not. A publication of that department reports that "Today, 90 to 95 percent of the department's graduates who plan an agricultural-related career go into agribusiness, with the remainder choosing production agriculture." Texas A&M has added two new masters degrees in agriculture: Agribusiness Management and Agri-Banking. Rutgers University has even coined the word "agrifactoring" to demonstrate the industrialization of agriculture, redefining it in terms of "the relationship of production agriculture to the food processing and distributing industries."

Wateriness generally indicates forced growing in an unbalanced soil and heavy applications of artificial fertilizers. Lady Eve Balfour, one of the founders of The Soil Association which pioneered organic farming, once defined the successful use of artificial fertilizers as "the art of making water stand up," and it has gone so far now that some California canneries are reported to be testing tomatoes for their water content, which the industry estimates was 10 per cent above average in 1972, and deducting the excess weight before paying the producers. Unfortunately, no one bothers to weigh the water in "fresh" tomatoes. You pay for the water, and for its transport, when you buy them.

A significant part of the increase in yields achieved by modern farming methods is due to the increased water content of crops. . . . So long as we are prepared to buy water at the same price as food, there will be an incentive to go on increasing the water content.

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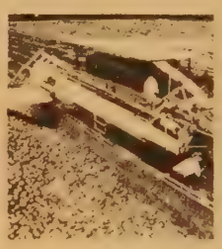
In a way, "buying from farmers" is what this book is all about, for whether you buy directly from the farm or from a shop, we believe you should buy with the farmer in mind and he should grow food with his customers in mind. You and he should agree about the kind of food you are to eat. Unless farmers and their customers can reestablish an understanding of each other's needs, neither of them will have much voice in the kind of food production and marketing that will come in the next few years. The farmer will grow for, and you will buy from, industrialists, bankers and speculators. Food will be more uniform, but it will not be better. It will be plentiful, but it will not be cheap.



THE SOCIAL COSTS OF AGRICULTURAL TECHNOLOGY

by E. Phillip LeVeen
University of California
Department of Agricultural Economics

Since the end of World War II the number of farms in the United States has declined by more than one half, the farm population has declined in similar proportion, the average acres per farm has more than doubled, and the average investment in farm land and assets has more than quadrupled. These are only a few of the statistics describing the sweeping transformation of the agricultural system which we frequently hear acclaimed for its phenomenal productive efficiency (i.e., in 1972 one farmer fed fifty people while in 1950 one farmer fed only fifteen people).

However, the modern technology which underlies this transformation has less well publicized, but dramatic detrimental effects on society. While we have been growing more food with fewer men, we have also destroyed thousands of rural communities, contaminated our water and air with agriculturally-produced pollutants, used up scarce land, water, and mineral resources, displaced and unemployed farm labor, and inflicted serious health hazards on those who produce and on those who consume the food.

In addition to these costs which affect us all indirectly, technology threatens to eliminate the last sector of our economy where the small-scale, owner-operated, family-sized enterprise still exists and predominates. Now even the remaining family farms have become large organizations and in the future, these 'family farms' will have little choice but to continue to expand and to emulate the organizational structure of the large industrial corporation if they want to succeed. This means that a young man contemplating a future in farming who does not either inherit or marry into a farm-owning family has almost no hope of becoming an independent farmer, and therefore within a short generation, it is likely that the family farm institution will become a relic of the past.

The decline of the family farm and rise of the factory farm means fewer opportunities for self-employed individuals, more concentrated ownership of land and farm resources by the already wealthy members of the society, a more stratified division of labor between wage workers, paid managers, and corporate administrators, and it means that very few of the farm owners will actually live on and know their land first hand. With the elimination of the family farm, the last vestige of a once open, competitive, and human-scaled economy will have disappeared and the entire economy will be dominated by large, bureaucratic, impersonal organizations. The loss in terms of human creativity and initiative, in terms of increasing alienation, in terms of the increased division of society into separate and very unequal classes of workers and owners, and in terms of possible increased environmental damage stemming from the lack of concern for long-run effects of farming practices on the land cannot be estimated in terms of dollars, but these costs will be great.

These trends could, in theory, be reversed. New technology might be developed to make small-scale, labor-intensive agriculture profitable. Farmers might join in building small cooperatives which would encourage cooperation in buying and selling products and the sharing of machinery and information. Such organizations have been successful in other parts of the world in maintaining a viable small-scale agriculture. Federal and state government might also institute a variety of penalties on large scale farming or land ownership which could further prevent or dull the growth incentives. Finally the small farmers must be protected from the influence of large corporations which buy from, sell to, and service agriculture. In recent years, one of the major sources of increased corporate control in agriculture has come from these groups. Unfortunately, all of the types of changes listed here involve the displacement of a politically and economically powerful set of interests by less powerful ones which means that they are not likely to occur voluntarily in this country.

Changes may come however. The energy crisis is an example of the types of natural forces which are increasingly going to play an important role in determining the way we produce food. Fossil fuels are not only used to drive the tractors and reapers, but also to produce the fertilizers and pesticides, and the power to run irrigation works. Our spread-out food system requires great additional amounts of energy to help in the processing and transportation of food. As energy sources decline and costs continue to increase, human labor will become a viable substitute for these other types of energy. New types of pest control, which will require skilled labor, will increasingly replace our dependence on chemicals; we will learn to use less fertilizer and irrigation water, and to use urban wastes in maintaining our soil fertility more effectively. Therefore the small farmer who uses his own labor, located near the city, digs his weeds by hand, and uses intensive agricultural methods which do not depend heavily on pesticides will be able to compete more effectively with the factory farm. These changes do not necessarily mean the revival of the family farm however. They do imply that in the future, more labor will be involved in agriculture and the trend toward fewer farmers will be stopped. Corporations may be able to adjust to these conditions without having to give the land back to small farmers. Small farmers themselves may not want to return to the simple family farm but rather, they may want to find new ways of organizing their activities to insure some measure of independence and still have new forms of sharing risks and tasks which are best done by larger groups.

In conclusion, it is becoming clear that our dependence on modern agricultural technology has led to false economies which will become an increasingly heavy burden in the future. This is true not only in the United States, but also in many developing nations which have recently adopted the similar technology of the "Green Revolution." While we cannot dispense with the agronomist and other agricultural scientists, we must begin to understand that the solutions to the problems posed by resource scarcity and environmental decay do not lie solely in the laboratory but rather in fundamental reforms of our social, political, and economic institutions. Such reforms threaten established groups and therefore will not come about easily. However, we have little choice: we cannot continue in the future as we have done in the past, and we have run out of technological solutions.

•

LAND USE

The Mother Earth News Almanac

Heloise-type hints from **Mother**, *Almanac-type tables, and sundry information for rural and urban homesteaders.*

—RM

The Mother Earth News Almanac
(A Guide Through the Seasons)
Mother Earth News Staff
1973; 361pp.
$1.95 postpaid
from:
Bantam Books, Inc.
666 5th Ave.
New York, NY 10019
or Whole Earth

If you suspect that a twister might be near, turn on your TV and let it warm up. Then tune to Channel 13 and, using the brightness control, darken the screen until it's almost—but not quite—completely black. Next, switch to Channel 2 and leave the set alone. Do NOT readjust the brightness control.

If you've followed the above instructions, lightning will appear on your television's screen as horizontal streaks or flashes and *an approaching tornado will cause the TV's picture to glow with a steady white light*. Or, if there's a station in your area that broadcasts on Channel 2, the darkened picture will become visible and will remain so as long as the tornado is nearby. *Take shelter immediately.*

Weller says that this tornado detection system works because a twister radiates electrical static and signals much like a TV broadcasting station. Since Channel 2, which is the 55-megacycle band, is the channel nearest the frequency of this electrical disturbance, it's naturally the channel most sensitive to the static generated by a tornado.

There's always the possibility, of course, that you might switch directly to Channel 2 and, finding an already-glowing screen, unknowingly darken out a twister's signal. That's why Weller advises you to tune in Channel 13 first, properly darken the screen of your set and *then* tune to Channel 2. This technique makes the system foolproof.

But what if the storm has knocked out your power lines and your TV set won't work? In such an emergency, Weller says that even the cheapest battery-powered AM radio can also be used as a tornado detector. Turn the radio on and tune it to the low end of the AM dial. . . down around 550 kilocycles. The radio will then pick up the same signals as the TV. Don't worry about irregular interference from lightning but if you hear a constant, regular roar of static. . . do *not* hesitate. Take shelter immediately.

Small Tractor Service Manual

The smaller tractors of 26 manufacturers. Before you buy it, write and ask if your make and model is included in this manual.

—RN

Small Tractor Service Manual
1972 (3rd ed.); 344pp.
$5.95 postpaid
from:
Technical Publications Div.
Intertec Publ. Corp.
1014 Wyandotte St.
Kansas City, MO 64105
or Whole Earth

Midwest Plan Service

8 page catalog of moderately priced handbooks and sets of plans for barns, livestock housing, hay, grain and machinery storage.

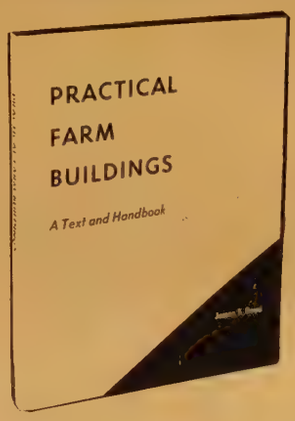
—RN
[Suggested by Henry Esbenshade]

Catalog free
from:
Midwest Plan Service
Agricultural Engineering
Iowa State University
Ames, IA 50010

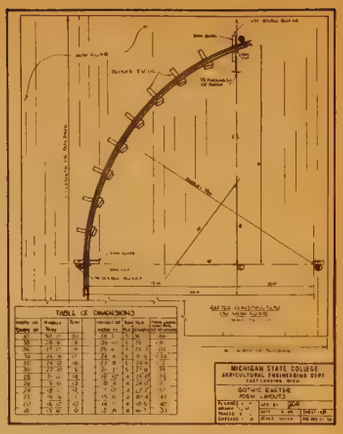
Practical Farm Buildings

If you're just trying to build a shed for your goats, this is not the book. But if you need to know how to build a loft so it can hold up 50 bushels of corn, or how much insulation you'll need in a wall to keep your cows warm at -40°, this book will tell you. It defines terms and explains the mathematical formulas necessary for designing farm buildings. Lots of invaluable tables and charts; nothing on plumbing or wiring; thorough on technique.

—RN



Practical Farm Buildings
(A Text and Handbook)
James S. Boyd
1973; 265pp.
$7.95 postpaid
from:
The Interstate Printers & Publishers, Inc.
19-27 N. Jackson St.
Danville, IL 61832
or Whole Earth



In states where supplies of low-grade wood are available, laminated rafters for gothic roofs can be made of 1" x 4" boards bent into a form and nailed as shown. The curve on the rafter is three-fourths the width of the building. The laminations should be nailed every 8 inches from both sides so there will be a nail every 4 inches in the rafter. These rafters should be spaced 2 feet O.C. and every sixth rafter braced similar to a gambrel rafter.

BEEKEEPING

by Dave Meeks

BOOKS

First Lessons in Beekeeping is the best of the small books and best first book on bees. Before buying any equipment at least get this to tell the names and uses of things you need. Clear and precise. **How to Keep Bees and Sell Honey** is a good how-to book and has some information not found elsewhere. Worth getting, though not as precise as **First Lessons in Beekeeping**. Either of these are preferable to **Starting Right with Bees** (Pg. 63), which is not clear, partially outdated, and contains some needless information.

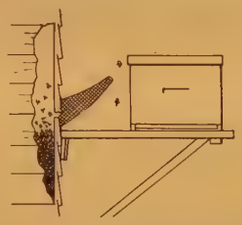


Diagram of transferring a colony of bees from a house by means of a screenwire cone.

Of the major books on beekeeping, **The Hive and the Honey Bee** stands out (suggested by Jim Nelson). Successor to the classic **Langstroth on the Hive and the Honeybee**, it is complete, logically organized, and highly recommended. **Beekeeping**, by J. E. Erkert and F. R. Shaw (published by Macmillan, 536 pp.) is similar in format to **The Hive and the Honey Bee.** It's very complete, with a fine bibliography and thorough treatments of the more scientific aspects of bee-keeping for the advanced bee student. **ABC and XYZ of Bee Culture** (Pg. 63) is very long and complete, but much of it is useless information. The encyclopedia format isn't as easy to follow as the publisher claims. Hard to fish out specific information.

There are many out of print works but two that stay clearly in my memory are Dr. C. C. Miller's **50 Years Among the Bees** and the early editions of L. L. Langstroth's **Langstroth on the Hive and the Honeybee.** Both are well worth the trouble it takes to find them.

Bees fanning at the entrance to pull air currents through the hive—cools the hive and helps to dehydrate the nectar and transform it into honey.

The Hive and the Honey Bee
Roy A. Grout, Ed.
1963 (revised); 556pp.
$6.75 postpaid
from:
Dadant & Sons, Inc.
Hamilton, IL 62341

First Lessons in Beekeeping
C. P. Dadant
1968 (revised; 127pp.
$1.00 postpaid
from:
Dadant & Sons Inc.
Hamilton, IL 62341

How To Keep Bees And Sell Honey
Walter T. Kelley
1973 (seventh edition); 141pp
$1.00 postpaid
from:
The Walter T. Kelley Co.
Clarkson, KY 42726

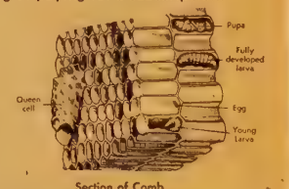
BEE EQUIPMENT SUPPLIERS

All supply free catalogs and all stock everything needed for beekeeping, including bees and queens and most of the major books. They all also try to sell subscriptions to the bee magazines, but basically these are advertising media and for the beginner offer little help. Buy one of the major books before thinking of paying for a subscription.

Catalogs free
from:
A. I. Root Co.
Medina, OH 44256

Dadant & Sons Inc.
Hamilton, IL 62341

Walter T. Kelley Co.
Clarkson, KY 42726



Section of Comb

These two California suppliers are equal to those above in selection and are more oriented to professional beekeepers. Lower prices on some items:

Los Angeles Honey Co.
1559 Fishburn Ave.
Los Angeles, CA 90063

Diamond Int'l Corp.
Apiary Dept.
Chico, CA 95926

Queen

Worker

Avoid Sears and other large department stores; their prices are high and they give poor advice and instructions with the equipment they sell.

FHA

by Lloyd Kahn

The Farmer's Home Administration makes loans of over $1 billion per year to farmers and residents of small towns in America. Some loans are to individuals or families; others are to groups of families, or to partnerships, corporations or public bodies.

The FHA states the purposes of its rural credit program as:

1. To help build the family farm system, the economic and social base of many rural communities.
2. To expand business and industry, increase income and employment, and control or abate pollution.
3. To install water and waste disposal systems and other community facilities that will help rural areas upgrade the quality of living and promote economic development and growth.
4. To provide or improve modest homes in suitable rural environments at prices and on terms that families of low or moderate income can afford.

Two basic qualifications for FHA loans:

1. It has to be rural. A town of 10,000 or less.
2. They issue loans, not grants, and they must be repaid. They'll want security for this.

If a person qualifies, loans are available for:

HOUSING: over 100,000 loans made each year. Home ownership loans: ". . . to buy, build, improve, repair, or rehabilitate rural homes. . . farm service buildings, and waste disposal systems and to provide water for household and farmstead use." Self help housing: loans to groups of 6-10 families who want to build but cannot obtain loans elsewhere. Rural rental housing: To buy land and build apartments for low income or elderly people.

FARMER PROGRAMS: The FHA supports the concept of the family farm. Loans to buy farms, to repair buildings, to buy livestock, seed, equipment, to develop water, to build ponds, to plant trees, etc. Loans are made to farmers with experience. They even have youth loans: kids under 18 can borrow money to buy cattle, chickens, to get started.

SMALL COMMUNITY AID: Loans have been made to over 4,000 towns for water and sewage systems, irrigation and drainage, acquiring grazing land. They also have made loans to Indian tribes to buy lands within their reservations.

BUSINESS LOANS: to start private business enterprises in rural areas. Loans to cooperatives serving low-income people, to ". . . federally recognized Indian tribes."

There are 1700 FHA offices in the U.S. usually in county seat towns. Look in the phone book under U.S. Dept. of Agriculture—— Farmers Home Administration. Call for information or write for:

Program Aid Brochures:
This is FHA PA-973
Self-Help Housing PA-990
Home Ownership PA-977
Rural Rental Housing PA-1039
Farm Labor Housing PA-521

Fact Sheets:
This is FHA
Farm Ownership Loans
Farm Operating Loans
Community Facilities
Grants to Help Develop Private Business Enterprises
Business & Industrial Loans

from:	or
Local office in county seat town (preferable)	Farmers Home Administration U.S. Department of Agriculture Washington, DC 20250

How to Grow Marijuana Indoors Under Lights

Underground monoculture.

—RN

[Suggested by Richard Green]

How to Grow Marijuana Indoors Under Lights
Murphy Stevens
1973; 61pp.
$3.00 postpaid
from:
Sun Magic Publishing Co.
P.O. Box 9841
Seattle, WA 98109
or Whole Earth

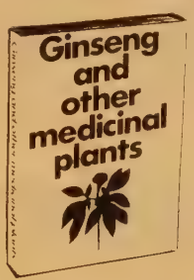
Gro-Lux lights are fluorescent lights that emit high concentrations of red and blue bands of the light spectrum. These are the main colors that plants use for photosynthesis. . . There are two basic types of Gro-Lux lights: the Standard Gro-Lux and the Gro-Lux Wide Spectrum. The Standard Gro-Lux light is better than the wide spectrum, because it emits more red and blue light. . . . The Wide-Spectrum lamp was developed for use as a supplementary source of lighting, such as that needed in a greenhouse.

Both the wide spectrum and Standard Gro-Lux lights come in three intensities: "regular output," "high output," and "very high output" (VHO). All together there are six types of Gro-Lux lamps; two for each intensity. The VHO fixture and lamp units are superior by far to the others.

Ginseng and Other Medicinal Plants

Perhaps the most mystical symbiosis of human and plant physiology. The best book to home grow ginseng, Goldenseal and some others. Lovely prose.

—PW



Ginseng and Other Medicinal Plants
A. R. Harding
1908 (1972); 367pp.
$4.00 postpaid
from:
Emporium Publications
P.O. Box 207
Boston, MA 02129
or Whole Earth

To sum up cultivation as it affects quality, we find the roots must be matured or at least to have passed the stage of rapid growth. If you adopt the plan of taking up your plants every year, you can easily sort out the matured roots. It sometimes happens in rich soil that roots will rot before maturing. If you are afraid of this, when the roots have reached a good size, transplant into very sterile poor soil—— two years in this. It will make fine, high-priced roots of them.

•

Ginseng is truly and wholly a savage. We can no more tame it than we can the partridge.

HUMAN USE OF PLANT ALKALOIDS

Growing the Hallucinogens (32pp.)
$2.25 postpaid

Kava Kava (36pp.)
1973
$2.25 postpaid

Legal Highs (32pp.)
$2.25 postpaid

Cannabis Alchemy: The Art of Modern Hashmaking (34pp.)
$2.25 postpaid

All from:
Twentieth Century Alchemist
Box 4858
San Francisco, CA 94101

"Twentieth Century Alchemists" are scholars in love with plant life and respectful of plant powers. After all the counter-culture trash written about getting high, these books shine with crystal intelligence.

—PW

OLOLUIQUE

Rivea corymbosa Hall.; Morning Glory family (Convolvulaceae)

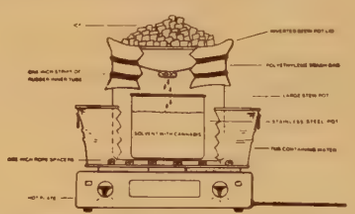
A slender perennial vine, woody at the base, with 4-inch-long heart-shaped leaves. The flowers are white, in large clusters 1-1/2 inches wide. The fruit is a one-seeded capsule. Native to tropical America.

Cultivation and Propagation: Cultivate much like the morning glory (which see) except that it is less hardy and should be started indoors in the north. It will also take more water than the common morning glory and, as it is somewhat woody, it can be cut back and brought indoors to carry it over the winter in the North.
Harvesting: The seeds should be gathered as the pods turn brown and dry.

—Growing the Hallucinogens

•

The essential oil is extracted from the cannabis material by refluxing (boiling) in a solvent. This essential oil (containing THC and related substances, chlorophyll, and the substances contributing the taste and smell) dissolves in the solvent (usually an alcohol) while the cellulose parts of the herb do not dissolve. The leached marijuana is removed by straining and the solvent containing the oil is evaporated, leaving as residue the essential oil of the herb.



As it is very dangerous to boil solvents (the fumes and liquid are quite flammable), it is necessary to use specialized methods in order to perform the operation safely.

—Cannabis Alchemy

•

CALIFORNIA POPPY *Eschscholtzia californica.* Family Papaveraceae (Poppy family).
Material: Leaves, flowers and capsules of common wild flower.
Usage: Materials are dried and smoked.
Active Constituents: Opium-related alkaloids: proto pine, chelerythrine, snaguinarine, *a*- and *b*-homochelidonine, and several glucosides.
Effects: Very mild marijuana-like euphoria from smoking lasting 20-30 minutes. Concentrated extract of plant may be more potent when ingested or smoked.
Contraindications: No apparent side effects. Not habit-forming. Appears to be ineffective when used again within 24 hours.
Supplier: Grows wild (protected by California law; misdemeanor, fine for plucking). Seeds B, FM, G, NK, RCS.

—Legal Highs

■

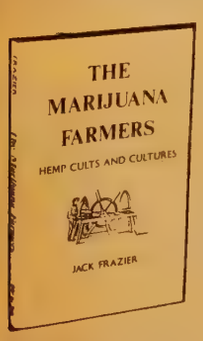
SASSAFRAS *Sassafras officinale albidum.* Family Lauraceae (Laurel family).
Material: Aromatic root-bark of North American tree.
Usage: Brewed as tea (1 oz./pt. water). Oil fraction extracted in alcohol or distilled. Safrole is not water-soluble. Starting dose 100-200 mg. of extracted and dried oil.
Active Constituents: Safrole (non-amine precursor of MDA [3,4-methylenedioxyamphetamine]).
Effects: Tea in large doses acts as stimulant and induces perspiration. Safrole (MDA) stimulant, hallucinogen; aphrodisiac in large doses, euphoriant in small doses.
Contraindications: Safrole is toxic to liver (avoid repeated use). Increases incidence of tumors in laboratory animals. Excessive doses may cause vomiting, shock, aphasia, and death by central paralysis of respiration. Normal use as tea is safe.
Supplier: Fresh root wild, eastern USA, collected in early spring or autumn. Dried root MGH; young trees RCS.

—Legal Highs

The Marijuana Farmers

This book veers between being a political tract and a very readable brief history of the economic and spiritual uses of marijuana. Frazier, who has "decided to donate a portion of the profits from this book toward reestablishing the hemp industry in North America," emphasizes the origins and movement of the plant throughout the world and its uses as hemp—— in rope, clothing and paper. An Appendix reprints a growers guide from 1765. Aside from this, no organized information on how to grow marijuana is presented, though some tips are included in a final chapter called "Conversations With a Hemp Farmer."

—RN



The Marijuana Farmers
(Hemp cults and cultures)
Jack Frazier
1974; 133pp.
$2.95 postpaid
from:
Solar Age Press
Box 5027
Charleston, WV 25311
or Whole Earth

In a very real sense, paper-making in New England was made possible by the widespread use of hemp and flax clothing and the availability of discarded underwear, dresses, britches, shirts, rope and sailcloth. . . . Paper in those days was made from 100% recycled material. This was our only source of paper for the first two hundred years of our history. It wasn't until papermakers began to use woodpulp that plants (trees) were killed and used for paper, then thrown away.

•

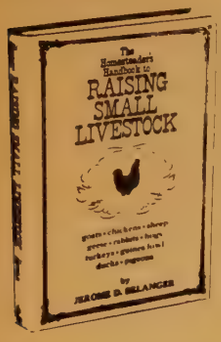
In the early forties, fate intervened on the side of hemp for a brief period. The Japanese bombed Pearl Harbor and invaded the Philippines, cutting off the supply of manila rope and twine on which our government was depending as a hemp substitute to protect the youth of the country from the dread "marijuana menace." The health of the youth had to be forgotten temporarily, while the farmers of Iowa, Nebraska, Minnesota, and other midwestern states rushed into the fields with their tractors to plant hemp. . . . The bumper crops of the forties show how effective the federal government can be at stimulating hemp raising when it suits their political purposes. Without any change in the law or an act of congress, the Department of Agriculture was able to get a crash program in high gear almost immediately. Willing farmers were located, seed was found, and a hemp planting manual was rushed into print.

The planting manual, known as FARMER'S BULLETIN NO. 1935, is both a historical curiosity and a valuable source of useful information. It was reprinted in 1952, when someone in Washington got worried that the Chinese might invade the Philippines, while our troops were tied down in Korea, and cut off our manila rope supply as the Japanese had done in 1941. Now that the paper shortage has hit and another crisis is at hand, a third printing of FARMER'S BULLETIN NO. 1935 would seem to be in order.

The Homesteader's Handbook to Raising Small Livestock

So thorough and clearly written, this is the only book anyone really needs to start raising rabbits, goats, poultry, sheep and hogs. Throughout, Belanger emphasizes selective breeding, record keeping and preventive medicine—— in short, careful management is worth the effort; and the book is worth $8.50.

—RM



The Homesteader's Handbook to Raising Small Livestock
Jerome D. Belanger
1974; 242pp.
$8.50 postpaid
from:
Rodale Press, Inc.
Book Division
33 East Minor
Emmaus, PA 18049
or Whole Earth

Although there is some disagreement with United States Department of Agriculture figures arrived at some years ago that placed rabbit higher in protein and food value than chicken, pork, or beef, rabbit still ranks closer in nutritional value to the red meats than to chicken. In infancy, rabbits are nursed on the richest milk produced by any animal: more than 15 percent protein, compared with cow milk which generally is about 3.5 percent. A young rabbit doubles its weight six days after birth, a calf doubles its weight only after 47 days.

Being lower in fat and higher in minerals than any other commonly used meat and being easily digested, rabbit is often prescribed for people with stomach trouble.

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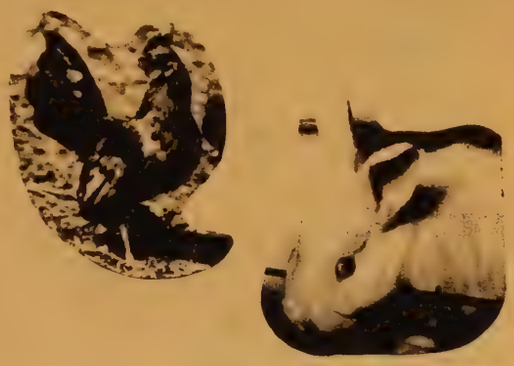


Commercial egg producers invariably replace their layers annually because the rate of lay the second year is too low to be profitable. . . It's possible to start raising chickens by buying birds that egg farmers consider all used up. Since these farmers seldom keep birds for the second year, they ship them to soup factories. The price a farmer gets is far below the cost of day-old chicks—— to say nothing of feeding those chicks until they start laying.

Starting Right with Milk Goats

A fine general goat book that, unlike **Grow It!** *or* **Raising Small Livestock**, *goes into details of making goat cream, butter, and soft and hard cheeses.*

—RM
[Suggested by George de Alth]

Starting Right with Milk Goats
Helen Walsh
1947; 138pp.
$3.00 postpaid
from:
Garden Way Publishing
Charlotte, VT 05445
or Whole Earth

Nail two scrub brushes to a post in this fashion and goats will "curry" themselves.

For small amounts of butter many people find the electric cake mixer a very satisfactory churn.

A gallon of cream will make two or three pounds of butter and in using goat milk it may be necessary to hold the cream from several milkings in the refrigerator before there is enough to work with. Each lot must be kept separate and none of it should be more than three or four days old. Old cream makes inferior butter that deteriorates rapidly unless pasteurized.

Left. *Milk can run out of the teat into the pail or* back into the udder. *So first close your thumb and first finger so the milk can not run back into the udder.* Center. *Next close your second finger—— and the milk should squirt out. Discard the first stream—— it will be high in bacteria.* Right. *Close the third finger. Use a steady pressure. Don't jerk down.*

The National Stock Dog Magazine

A small quarterly composed largely of letters from readers. The "Breeders Directory" includes listing from coast to coast (but not Canada) for Australian and English Shepherds, Australian Cattle Dogs (Queensland Blue Heelers), and Border Collies—— all working dogs.

—RN

The National Stock Dog Magazine
E.G. Emanuel, Ed.
$3.00/yr (quarterly)
from:
National Stock
Dog Magazine
Rt. 1
Butler, IN 46721

Instruction & Training Booklets

NEW TRAINING BOOK NOW AVAILABLE TO YOU—— **The Perfect Stock Dog** by Ben Means. . . Deals with training for both cattle and sheep. 20 pages, 7 pictures, 4 sketches. This book is written by a Border Collie man to be helpful to new Border Collie owners. But, it surely would also be very helpful for other breeds. Price $2.50.

Another new book that you may want is Cow Dog by Lyman Nash. . . Brief, but good instructions, well written. 20 pages, 15 illustrations, 3 sketches. Price $2.50 We will take your order. (No C.O.D.)
Send to:

The National Stock Dog Magazine
Route 1
Butler, Indiana 46721

Herbal Handbook for Farm and Stable

A wealth of information on dealing with sick animals, treating them, and preventing it from happening again. Juliette outlines her natural rearing method beginning with care from conception which ensures healthy, sound animals. She deals specifically with sheep, goats, cows, horses, poultry, sheep dogs and bees.

—Pam Hartman

Herbal Handbook for Farm and Stable
Juliette de Bairacli Levy
1973; 290pp.
$9.75 postpaid
from:
MeadowBrook Herb Garden
Wyoming, RI 02898
or Whole Earth

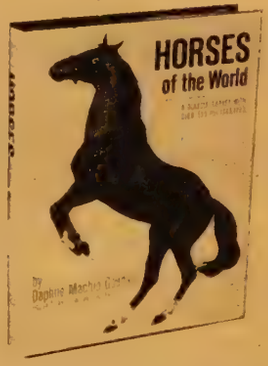
Cream Rises
LIVESTOCK

The Homesteader's Handbook to Raising Small Livestock
Rabbits, poultry, goats, pigs, sheep 498
Goat Husbandry *The classic* 64
Schooling of the Western Horse
Wise technique 499
Domestic Rabbit Production
Definitive 66
Lameness in Horses
For health & shoeing 499
Wool Away *Sheep shearing* 560
Starting Right with Milk Goats
Best intro 498
Veterinary Guide for Farmers *First Aid* 65
Nasco Farm and Ranch Catalog
Supplies 60
The Buffalo Book *The compleat bison* 491

Horses of the World

Most books on horse breeds list so few "recognized breeds as to make most horseflesh seem like scum. Some breeds evolve with nature; many are bred. This book lists 188, with sensational photographs of each.

—RM



Horses of the World
(A Classic Survey with Over 300 Photographs)
Daphne Machin Goodall
1965; 272pp.
$10.95 postpaid
from:
Macmillan Pub. Co., Inc
Order Dept.
Front & Brown Sts.
Riverside, NJ
08075
or Whole Earth

Although the Thoroughbred has found a home in many countries, it is already a fact that, in some of them, the breed degenerates very quickly unless additions of new blood are imported from England. So the Thoroughbred is not entirely a fixed breed.

Perhaps we have a case for introducing some 'old' blood and founding new lines? We certainly have a case for examining the desirability of such action and for ensuring that the qualities of stamina and hardiness are not lost in this breed. For these qualities are needed wherever Thoroughbred blood is used to 'improve' other breeds, and although it may well have been a benefit a hundred years ago, can the same be said today?

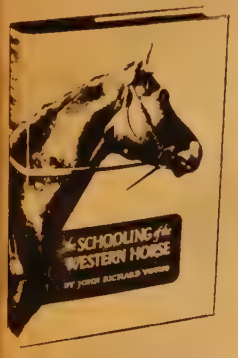
Breton

The Schooling of the Western Horse

This is an inspiring book on communication with horses. It explains at length how a rider can become a teacher to every horse he mounts, and that only as a teacher can he begin to learn from horses. Carefully described is a method of training that should finally obsolete any idea of "breaking a horse." Also good argument on proper saddle design.

—RM

[Suggested by Bob Roessel]



The Schooling of the Western Horse
John Richard Young
1954; 322pp.
$5.95 postpaid
from:
Sales Office
Univ. of Oklahoma Press
1005 Asp Ave.
Norman, OK 73069
or Whole Earth

One way that horsemen who can afford to own only one horse at a time can increase and broaden their experience is to maintain as rapid a turnover of personal mounts as they find practical or convenient. In other words, use a horse until you feel that you have learned all you can from him, have mastered his particular temperament and peculiarities, and have made a better mount of him as well as a better horseman of yourself. Then, stifling whatever sentimental attachment you may have developed for the animal, sell him to somebody who will appreciate him and buy yourself another horse, preferably one of a markedly different temperament. School the new horse until again you feel that you have mastered him and that both of you have benefited from the experience. . . .In a few years, following this system, you can teach yourself much more about horses and horsemanship than you could learn by riding the same horse for a decade.

•

Almost all troubles that one is likely to encounter in schooling a horse stem from four principal errors commonly committed by a majority of horsemen. These errors are:

1. Lack of a definite plan, method, or system of procedure, with a clearly conceived objective in view, *before* the training is begun.
2. Inconsistency by the trainer in applying cues or aids to which he expects the horse to respond.
3. Demanding too much of a horse at one time.
4. "Rushing" a young horse's progress, demanding not only too much but demanding it too soon.

The Way of a Horse

Horse breeding— not by artificial insemination, or trucking a mare to a stud for a day, but as part of raising horses. Keep the stallion in a pasture with the mares, de Beaumont says; keep a goat with a shut-up horse for companionship; work on gentling every horse from the day it is born. **Schooling the Western Horse** *helps to modernize bronk busting into horse training.* **The Way of a Horse** *brings breeding back from 1984.*

—RM

The Way of a Horse
Marguerite de Beaumont
1953; 191pp.
$8.50 postpaid
from:
The British Book Ctr, Inc.
Trade & Library Div.
996 Lexington Ave.
New York, NY 10021
or Whole Earth

The mare had no milk whatever, so we used three goats, morning, noon and evening, bringing them into the loose box with the mare and foal. . . This worked very well indeed. We had none of the troubles connected with bottle feeding, and the foal grew and did excellently. . . That was not the first time I have used goats. On one occasion we had an orphan foal. This we reared quite successfully on a goat. I would never like to be without them, as horses will drink goat's milk out of a bucket, and if they are in low condition it is most useful for building up constitution after illness or injury. Horses and goats get on very well together. The content of goat's milk makes it suitable to be fed to foals without the addition of water or sugar.

•

It may seem strange to say that there is nothing so gentle as a stallion. I have had the interesting experience at my Stud of having the same stallion turned out with mares for some years, with an occasional new mare introduced into his herd. In this way one is able to understand the life of horses in their wild state, to see how very strong the protective instinct of a stallion really is, how very gentle he always is with his mares and foals. . . . I have seen this horse in the field with mares when they foal, standing quietly by the side of the mare and helping her to lick the foal dry when it was born.

HORSE CARE & HORSESHOEING

by Jeb Barton

Nomadics Tipi Makers
Star Route, Box 41
Cloverdale, OR 97112

Lameness in Horses is my personal education source when dealing with my own horses, buying horses, or shoeing. It is direct, clearly written, very well illustrated with drawings and photographs, and written in language that is easy to follow— both common and Latin names usually occurring side by side. Every lameness is accompanied by a section on; Definition, Etiology (theory of the causes), Signs, Diagnosis and Differential Diagnosis, Treatment, and Prognosis (expected future course of the disease). Virtually all horse lamenesses of any significance are included and every common lameness is thoroughly covered.

If you know nothing of horses and are thinking of buying one, the first 50 pages of the book (including 32 drawings and photos) offer an excellent introduction to conformation guidelines— what a horse should and should not look like to the untrained eye. Very informative. There are also 10 additional pages explaining how to determine whether or not the horse you are looking at is "sound"— "Examination for Soundness."

The book includes a section on horseshoeing and trimming, 25 pages. The information is good and well illustrated. I regard it as helpful to the unfamiliar but not to be used as a sole guide to someone who has never trimmed a horse's foot, let alone shod one. There is a limit to the do-it-yourself-from-a-book and I feel it stops abruptly with living things. No one should attempt to trim (certainly not shoe) a horse until they have had some first hand instruction from a reliable teacher. 90% of horse lameness occurs from the knee down!

Lameness in Horses
O. R. Adams
1962, 1966; 563pp.
$12.50 postpaid
from:
Lea & Febiger
600 Washington Square
Philadelphia, PA 19106
or Whole Earth

I have studied in depth the book **Horseshoeing** by Lungwitz that is also listed in Pg. 67 of the **Last WEC**. The book is good. Illustrations are excellent but the text is incomplete and some of the information is antiquated. I suggest **Elements of Farrier Science**. It is modern, to the point, and somewhat more complete and comprehensive than the Lungwitz book. It is a more useful all around book. As it says, ". . . Farrier Science." (Caution: this book advertises "Enderes" tools in the back. Enderes tools are very poor quality and are not worth the buy.)

Elements of Farrier Science. 169 pages, by D. M. Canfield Printed and distributed by Enderes Tool Co., Inc. Albert Lea, Minnesota 56007. $11.95. This book can probably be ordered through any feed or agriculture supply store.

HORSESHOEING AND FARRIER'S TOOLS

The best Farrier's tools made in this country are made by G. E. Forge and Tool works. G. E. stands for George Earnest, and as their catalog says "George Earnest spent a lifetime of work at the horseshoeing and blacksmith trades and as a result of his many years of experience and understanding for the need of a good quality tool, he designed the G. E. set of tools." They claim, "Our tools are made from the very best quality refined tool steel on the market today." I think it's true.

The G. E. saddle horse clinchers and gooseneck clinchers are two of the best designed tools that I have ever held in my hand. Most of their tools cost between $20-$35. That is $10-$20 higher than most any other tool maker, but it is more than worth it. Even with frequent use they should outlast the owner if given proper care.

G. E. makes; nippers, clinchers, pull offs, crease nail pullers, hoof testers, fire tongs and rounding hammers. Catalog on request:

G. E. Forge and Tool Works
P.O. Box 369
Arroyo Grande, CA 93420

If you can't afford G. E. tools then the next best name is Diamond. (I prefer Diamond fire tongs rather than the G. E.'s.) Diamond tools are well designed, the steel quality is adequate, they are about half as expensive as G. E. tools, and they can be ordered through most feed stores or saddle shops. Example, 15" Diamond nippers are about $20. G. E. 14" nippers are about $35.

Unless you simply have no other choice, avoid tools made by S. S. S., Multi-Products, Enderes or Heller. Nicholson makes the best horse rasp, but only leads Willie-Charlie by a nose, while Heller and the rest trail far behind. The best hoof knife is made by Erik Frost of Sweden. Well designed. Their wide blade knife is more useful than their narrow blade knife. Both right and left handed knives are available. Can be found at most feed stores or saddle shops. Bordizzo of Italy is a poorly designed hoof knife, but they do make the only extra thin blade knife that I have seen. It is quite useful for scouring out abcesses.

Farrier's Anvils: The two most important aspects of an anvil are its steel quality and its conformation. (A farrier's anvil is different in design from a blacksmith's anvil.) A farrier's anvil should weigh between 100 and 125 lbs. Of those readily available, the G. E. ($175) and the Centaur ($125) are the best. I use a G. E. I have never used a Centaur but it has been highly recommended by a seasoned farrier who knows what he's looking at. I have seen the complete specifications on the Centaur anvil and it does look every bit as good as a G. E. Catalog on request.

Centaur Company
Blacksmiths' and Horseshoers' Supplies
Burlington, Wisc. 53105

(The Centaur Co. does carry D. S. Handmade horseshoeing tools. D. S. tools are comparable to G. E. tools but usually not as available.)

Horseshoeing Nails: The best nails are made by Capewell. The standard saddle horse size is City Head 5. They are expensive. About $2 per lb. Do not use Multi-Products Co. nails. They are only $1.10 per lb, but are so thick that they almost always split the hoof wall— even with careful nailing on a thick-walled foot! You are also liable to cause undue and unseen pressure on the sensitive laminae.

Earth Garden

A gentle, skilled homestead journal from Australia— with an unprovincial world view.

—RM

Earth Garden
Irene &
Keith V. Smith, Eds.
$4.50/yr
from:
Earth Garden
P.O. Box 111
Balmain, 2041
Australia

DOG BISCUITS

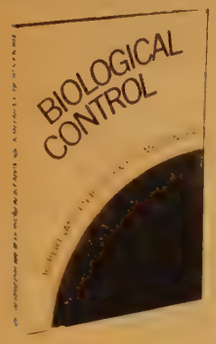
Egg shells crushed finely (vitamiser is best).
Any ground grains.
Mix with water, spread on well-oiled tray. Sprinkle oil on top. Cook for about 40 minutes. Cut or break into small pieces. These biscuits can be made either hard or soft, depending on the amount of water used.

Biological Control

Biological control is a branch of ecology. The term normally applies to the control of insect pests through the manipulation of their natural enemies—— predators, parasites or diseases. The intricacy of this subject is a big part of its fascination, but the explanations have until now been contained in an arm-full of specialized textbooks.

Biological Control *by van den Bosch and Messenger, does a superb job of providing a brief, non-technical explanation of this subject. As an interested layman, I found the material both clear and thorough. Although neither this book nor the Brooklyn Botanic Garden pamphlet on the subject (Pg. 49, item No. 34) are for running to when you want to know what kind of bug is eating your cabbage,* **Biological Control** *is well worth your time if you are interested in ecology, organic gardening or any style of farming.*

—RN



Biological Control
Robert van den Bosch & P.S. Messenger
1973; 180pp.
$4.50 postpaid
from:
Intext Press
257 Park Avenue South
New York, NY 10010
or Whole Earth

Medieval date growers in Arabia seasonally transported cultures of predatory ants from nearby mountains, where presumably they occurred naturally, to the oases to control *phytophagous ants* which attacked date palm. This practice constitutes the first known example of the movement, by man, of natural enemies for purposes of biological control.

•

The basic flaw in the modern insecticide is its broad toxicity. The materials kill indiscriminately, and when applied in the field their broadly toxic action can virtually strip the treated areas of arthropod life. Thus, where they are used, the ecosystemic web is often shattered overnight, and a biotic vacuum created in which violent reactions are almost inevitable.

Adult convergens lady beetle, Hyppodamia convergens *Guerin, feeding on an aphid. Photo by Ken Middleham, University of California, Riverside.*

Cream Rises
GARDENING

Good Food Naturally
Large or small-scale gardening **501**

The Basic Book of Organic Gardening
Basic Rodale **50**

The Nursery-Manual *Classic from 1896* **503**

Sunset Guide to Organic Gardening
Beginner's specialty **502**

Dwarfed Fruit Trees *Classic* **491**

Commonsense Pest Control

Presents the alternatives to toxic chemicals, including doing nothing—— which sometimes can be the best option. Brief descriptions of what to do for common pests in the garden and household. I like this booklet for the questions it raises (what is a "pest?" and why do people get so freaked out by insects?), and the understanding and tolerant attitude it advocates. A good place to start.

—RN

Common Sense Pest Control
Helga Olkowski
1971; 52pp.
$2.00 postpaid
from:
Consumers Cooperative of Berkeley, Inc.
4805 Central Ave.
Berkeley, CA 94804
or Whole Earth

The importance of the "resistance" problem, alone, can be understood when you realize that out of 27 insect pests, each of which in 1968 was reported to cause over a million dollars worth of damage, 40% were already resistant to insecticides (Van den Bosch, personal communication). Clearly, chemical control is no permanent solution.

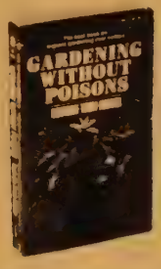
•

For your own understanding of the aphid control process, learn to recognize a "mummy." This is an aphid which has been stung by an aphid-killing wasp, and appears swollen, sometimes with a metallic color, and stuck tight to the plant. Within this stung aphid more parasitic wasps are developing. The sight of these mummies here and there among the normal population is a sign that help has arrived and should encourage you to hold off on the poisons.

Gardening Without Poisons

A book of methods that can bring a garden into natural balance. Diversity is her theme—— in plants, weeds, bugs, birds. It's a survey course from companion planting to biological control and resistance breeding, and it far surpasses **Organic Gardening Without Poisons** *(Pg. 54). But for trouble-shooting, stick with* **The Organic Way to Plant Protection** *(also reviewed on Pg. 54).*

—RM



Gardening Without Poisons
Beatrice Trum Hunter
1971; 352pp.
$1.25 postpaid
from:
Berkeley Publishing Co.
200 Madison Ave.
New York, NY 10016
or Whole Earth

The coyote is another creature that gives a surprising amount of help to the farmer, despite current attempts to exterminate him with poisons. Twenty percent or more of his diet in normal times consists of insects, and during periods of heavy infestation of grasshoppers or similar creatures, he feeds on them almost exclusively. In a Kansas State University study he was rated as worth at least eleven dollars a year to the farmer by controlling rabbits that eat grass and hay, and an additional ten dollars for keeping down the rats and mice that raid stored feed and grain.

•

The use of sonic, ultrasonic, and electronic devices holds promise for future application. Scare devices operating on a dog-whistle principle are not feasible since the range of hearing for birds is approximately the same as for humans. However, it may be possible to use a sound which causes irritation, pain, or confusion in birds. At the Salt Lake City Airport, powerful radar confused flocks of geese so badly that they had to reorganize several times and detour the airport.

Light beacons have been used successfully to discourage night-feeding ducks in grain fields. Bulbs from 500 to 2000 watts can protect up to 640 acres. Such beacons are attached to turntables, and either revolve or flash.

For City Trees

We develop insect management programs for city shade trees in order to reduce the use of pesticides in urban areas. Our specialty is classical biological control, or the importation of selected beneficial insects that are specific to various pests and will control their numbers.

We have been successful in developing such a program for the city of Berkeley, CA. This program saves the city a considerable sum of money yearly which makes them happy, and has greatly reduced the use of pesticides on the city shade trees, which makes us happy. We are now developing a similar program for the city of San Jose (250,000 city street trees.) This work must be supported by the public to exist—— no industry will fund it because such a program produces no marketable product. If you would like to reduce the use of pesticides in your city, write for a description of our work. (Please include $1 to cover costs of mimeographing and postage.) Perhaps you can get your city interested.

Dr. William Olkowski
Helga Olkowski
1307 Acton St.
Berkeley, CA 94706

Maxicrop Seaweed

Dear Whole Earth Epilog,

Maxicrop is made from Norwegian seaweed which is harvested only once in 5 years in the same spot, under government control, so as to permit the plants to regrow. It is better than the Korean or Pacific kelp because it grows in much diluted water from the many rivers flowing into the cold northern waters, water rich in oxygen. It is harvested by hand so as not to destroy the plant attachments, and rinsed and dried in the sun, not at 800 degrees heat as is done with the Korean and Pacific kelps. That is why the color is not dark or purplish but greenish brown. It also has only 1/3 as much sodium chloride as the Pacific seaweed, and although high in potassium, does not have the very high, overbalanced content characteristic of the Pacific kelp. Although the latter does have more trace minerals, this is of no significance because the crops utilize only extremely minute amounts. For all these reasons, seaweed from the cold northern waters of the Atlantic are far superior, and Maxicrop meets far higher standards for quality, uniformity and efficacy than any other. Offer both types to your animals and see which they reject!

Maxicrop liquid seaweed is simply hydrolyzed by steam and pressure, then ground so finely that it dissolves instantly. This is a foliar spray, but also used on soil to stimulate growth of soil microorganisms. It is particularly effective because it not only is absorbed by the leaves but in doing so stimulates the roots to pick up more nutrients than they otherwise would. (Extract made by soaking kelp does not have the same good effect as the hydrolyzed.) In addition to supplying trace minerals effectively this way (avoiding the possibility of loss in soil), the foliar spray strengthens the plant to fight off fungus diseases and some virus diseases, and also gives protection against frost. The hormone in it prevents blossom drop and encourages fruit set. In granular form the seaweed supplies all the trace elements in chelated form so that they are always available and not tied up in insoluble compounds. Granular seaweed lasts in the soil for 3 years, and provides all the values of the foliar, but less rapidly as it has to be worked over first by the soil microorganisms.

Because seaweed has all these many features, so many more than anything else available, if you had to choose only one item for your garden, it should be MAXICROP. Maxicrop has imitations, but it is the best by harvest, by preparation, by standard, by research results, and by the British patented process, which gets into solution (of the foliar spray powder) all of the plant except its fiber.

—Bargyla Rateaver

prices from:
Maxicrop, U.S.A., Inc.
P.O. Box 964
Arlington Heights, IL
60006

Another use for urine besides washing wound

I have some notes here for persons desiring to sensibly utilize one of our most abundant "waste" products, namely piss. Urine.

I have found that certain plants love piss. (Mine, anyway) It is a solution high in nitrogen-containing and organic chemicals. Some plants probably can't tolerate undiluted urine, and I diluted mine about 2 bladderfuls to a gallon of water. Different concentrations for different plants. Experimentation.

Last Spring I discovered a small patch of some kind of milkweed in the yard and: Every 3 or 4 days I urinated on half the plants. The other half was a control group. The whole patch received light watering daily. The pissed-on plants were 3 times as high as the untreated ones within a few months. Their color was a darker green and they appeal healthier than the controls.

NOTE: Maybe meat-eaters urine, having more toxins than vegetarians, wouldn't be so good for plants unless diluted a great deal.?

Besides this horticultural use for piss, there must be other tried and true applications. I have heard of these:

1. mordant for fixing natural dyes in material.
2. tanning agent for preserving hides and skins.
3. marking the boundaries of your "territory" to keep predators from livestock & gardens.

Well, it's an idea.

Love,
Hank
Nelson, B.C.

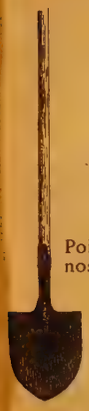
Good Food Naturally

A WONDERFUL BOOK! Harrison has been gardening one piece of land organically for 26 years and marketing his produce; so he knows feasibility—what works and what doesn't work. An apprenticeship with this book while gardening will make the most of what your garden and the book can teach.

—RM

Good Food Naturally
(How to Grow It, Cook It, Keep It)
John B. Harrison
1973; 111pp.
$2.95 postpaid
from:
Keats Publishing, Inc.
212 Elm St.
New Canaan,
CT 06840
or Whole Earth

Sticks and string for marking



Pointed nose shovel

Planet Jr. wheel seeder with cultivating attachments

Wheelbarrow

Garden fork

The choice of plant variety poses a real problem for the organic grower. Many new varieties may be not satisfactory for organic culture. The reason is that the customers who buy the largest amounts of seed are the commercial growers who serve the processing factories or the retail trade, so that seed producers cater largely to their needs. Breeding plants with the characteristics that such customers require can result in the loss of vigour in variety and thus be of little use to the organic farmer whose aim is vigorous plants for maximum nutrition. . . .So stay with the tried and proven varieties unless you have information from an experienced person that a new variety has proven to be satisfactory over some years. . . Many of the newer varieties will have initials or numbers in the plant names indicating that they are newcomers and may have been bred for particular commercial qualities.

•

Before seeding begins the surface tilth must be correct since it can mean the difference between success and failure. The organic farmer uses the size of the seed to be planted as a rough guide for the size of the soil particles which must be fine enough to cover the seed completely and consequently exclude atmospheric air from coming in contact with the seed. Making the seedbed finer than necessary merely because it is eye-pleasing is not only a waste of effort but unnecessarily destructive to the soil. It must be remembered that once soil structure is destroyed the transference of moisture to the plant is restricted.

•

Even after the seed bed is sufficiently fine to begin planting, it will pay to wait a week or two to give weeds a chance to germinate. The tilling done to prepare the soil for seeding will have brought dormant weed seeds into germination, and even though these tiny seedlings are invisible they will be there. One fine raking before seeding will kill those weeds and save a great deal of effort later in the season thus validating the old adage that the time to kill weeds is before you see them.

•

Compacting of topsoil is never healthy or helpful for plant life so hoeing is required after any pounding downpour.

•

The first pickings of any plant are the choicest in flavour and are nutritionally superior to subsequent pickings. The variations in flavour between the first and last pickings of certain fruits, particularly strawberries, confirm this. Studies have shown that their vitamin C content drops about 50 per cent in the first two weeks of picking. The sweetness of sugar in the first strawberries is disguised by the tartness of the high ascorbic acid content. As more and more berries are produced leaving less and less ascorbic acid in the plant the sweetness of the flavour then predominate in the later pickings. Those who prefer such smaller later pickings of strawberries, because of their sweetness, do not realize that they have lost much vitamin C. Such marked flavour differences suggest marked nutritional differences. Jam makers are cognizant of the exceptional jelling quality of the first berries in contrast with later pickings. The latter often will not jell without the addition of some kind of pectin. . . . To enjoy the true, rich flavour of strawberries, you should pick and eat them when they are thoroughly warmed by the sun. They are unlike raspberries, whose flavour and piquancy is enhanced by chilling.

Growing Vegetables in the Home Garden

This has superseded **Suburban and Farm Vegetable Gardens** *(Pg. 53). Detailed information on safe planting dates for all 50 states for both spring and fall frosts, plus growing instructions for 59 vegetables. The USDA spends our money to encourage us to be food consumers rather than food producers. With its vast resources, it could have cranked out a better home vegetable gardening pamphlet than this.*

—RN

Growing Vegetables in the Home Garden
(Home and Garden Bulletin No. 202)
Robert E. Wester
1972; 49pp.
$0.75 postpaid
from:
Supt. of Documents
Govt. Printing Office
Washington, DC 20402
or Whole Earth

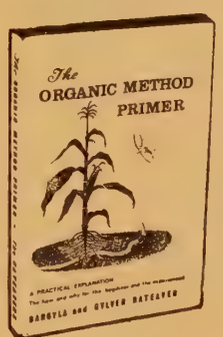
TABLE 1.—*Approximate rates of fertilizer application per 50 or 100 feet of garden row, and per 100 to 2,000 square feet of garden area, corresponding to given rates per acre.*

Measurement	Weight of fertilizer to apply when the weight to be applied per acre is—			
	100 pounds	400 pounds	800 pounds	1,200 pounds
Space between rows, and row length (feet):	*Pounds*	*Pounds*	*Pounds*	*Pounds*
2 wide, 50 long	0.25	1.0	2.0	3.0
2 wide, 100 long	.50	2.0	4.0	6.0
2½ wide, 50 long	.30	1.2	2.4	3.6
2½ wide, 100 long	.60	2.4	4.8	7.2
3 wide, 50 long	.35	1.4	2.8	4.2
3 wide, 100 long	.70	2.8	5.6	8.4
Area (square feet):				
100	.25	1.0	2.0	3.0
500	1.25	5.0	10.0	15.0
1,000	2.50	10.0	20.0	30.0
1,500	3.75	15.0	30.0	45.0
2,000	5.00	20.0	40.0	60.0

The Organic Method Primer

Within the organic gardening movement there are numerous schools of thought, and they are often contradictory. The advantage of **The Organic Method Primer** *is that the authors have made a compilation of the various beliefs and methods, and have added to them their own practical experience from years of teaching and gardening organically. You can learn what a BioDynamic farmer would do in a given situation, and then compare that with the advice of a mulch gardener. For its length, it is one of the most comprehensive gardening books I have read—relatively "far out" subjects like biomagnetics are covered, but there is also solid advice on what to look for when you buy a mechanical shredder. The section on organic pest control techniques is particularly complete; it would take a long time just to try all of the remedies that are described here.*

—RN



The Organic Method Primer
Bargyla and Gylver Rateaver
1973; 257pp.
$6.50 postpaid
from:
Bargyla Rateaver
Pauma Valley, CA
92061
or Whole Earth

Frost protection can be given plants by spraying with Valerian extract, the *Valeriana officinalis*, with dissected leaf, not the plain, simple leaf. Liquid, hydrolyzed seaweed also gives protection from freezing weather. Injury appears to be due to shortage of some nutrient, caused by cold. Seaweed increases the percent of solids in the cells; there is less liquid there to freeze; it gives the plant strength to resist frost damage harm; and it puts just enough salts into the moisture on the leaf to lower the freezing point there.

Another aid is water sprinkled on the plants to coat them with ice; then if air temperature goes lower than freezing, the leaves will be kept at ice temperature, not lower. There are some nozzles that make such an exceedingly fine fog that they create a mist over an entire orchard, which acts as a protective blanket and prevents frost damage.

•

Fungus disease is best prevented by good air circulation and watering plants during the morning so they can dry off before night. Letting vine vegetables grow high is good protection. Remove all dead or infected fruit on plants or on the ground, and put in the compost pile. Get rid of trash, boxes, baskets, boards and any other things lying around in which organisms can hide and overwinter.

The Dutch Mountain Nursery

Puts out a remarkable plant catalog specializing in plants which birds and wild animals eat, with life zone studies and instructions on how to encourage whatever wild species you choose.

—Gary Snyder

The Dutch Mountain Nursery Catalog
free
from:
The Dutch Mountain Nursery
Augusta, MI 49012

LAND USE

Sunset Guide to Organic Gardening

This is one of the better "how-to" books, well worth the price. It has several strong points: 1. Many "how-to" gardening books are written for the east coast, but this is for the West, and this emphasis comes out all through the book. 2. It is very visual—it could be even more so. Most gardening books are too verbal and consequently confusing. 3. There is some good basic information that is presented clearly. 4. There is a list of cultural references; the ones on ornamentals and lawn care are particularly valuable and their inclusion reveals the obvious clientele for the book— the homeowner who wants to have a garden.

—Steve Kaffka

Sunset Guide to Organic Gardening
1971; 72pp.
$1.95 postpaid
from:
Lane Magazine & Book Co.
Menlo Park, CA 94025
or Whole Earth

How to Figure Actual Nitrogen

Fertilizing recommendations often call for a certain amount of actual nitrogen (as in, "apply 1 pound actual nitrogen per 1,000 square feet"). Here is how to calculate actual nitrogen or actual anything-else:

- Look for the percentage of nitrogen (N) on the fertilizer label.
- Multiply that percentage times the weight of the fertilizer. For example, 10 pounds of blood meal (13 percent nitrogen) contains 1.3 pounds actual nitrogen.

•

There is a point in each annual plant's development when tissues harden, growth stops, and the seed part of the growth cycle is triggered; anything you can do to prevent premature hardening of the plants will prolong bloom. Tissues harden if the supply of nutrients gives out before the plant is mature; cold nights or hot weather have the same effect; so do drying winds. Lack of water and damage to the plant by disease or insects also contribute to this. Always keep faded blooms picked off (to prevent seed formation); this can encourage more flowers to form even after hardening has begun.

Underground pests like gophers and moles will be foiled by chicken wire bottom of this raised bed, yet plant roots are not confined.

•

Most seedlings, if put into cold, wet soil will just stand still until soil warms up. The same advice applies when you sow seed in the open ground.

The Organic Gardener

A comprehensive book for gardeners who really like to read. It covers more non-chemical tricks than I've seen in any gardening book.

—RM

Many towns now have sewage treatment plants where the end product is activated sludge, which is germless, dry, and smells like the floor of the forest. It is a good source of nitrogen and minerals. . . . By the time the organic gardener gets heated and bubbled activated sludge, the nitrogen content is about up to what it would be in cottonseed meal—that is, 5 to 6 percent— and its phosphorus up to 3 to 6 percent. . . For gardens and farmland, season it for six months and then put it on before rain, preferably in the autumn. Sludge will not only provide the major nutrients, it will also improve the physical properties of your soil and increase productivity of some if not all plants. Spinach is not much benefited by it; oats and beans

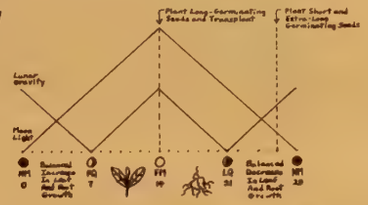
White geraniums (repel Japanese beetles from corn, asparagus, kohlrabi, soybeans)
Mexican marigolds (repel nematodes and control club root in brassica vegetables; protect cucumbers)
Radishes (mark rows and precede long-term crops)
Nasturtiums (rebuff cucumber beetle, Mexican bean beetle)
Garlic (rebuffs rabbits, many insect pests; protects apples, pears, cucumbers, peas, celery, lettuce, etc.; makes useful spray)
Onions and Chives (same as above but less potent)
Dill (trap plant for tomato worm)

How to Grow More Vegetables

Introductory gardening, with two advantages over the books reviewed in the Biodynamic Gardening section on Pg. 53: 1. better explanation of planting in raised beds, which along with close spacing between plants and heavy feeding is what is meant by the term "French-intensive"; and 2. a more detailed discussion of what and when to plant by the moon.

—RN

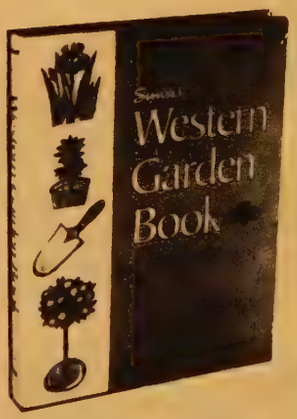
How to Grow More Vegetables
(Than you ever thought possible on less land than you can imagine)
John Jeavons
1974; 82pp.
$4.00 postpaid
from:
Ecology Action of the Midpeninsula
2225 El Camino Real
Palo Alto, CA 94306



The greatest sum of increasing forces occurs at the New Moon. The lunar gravitational pull which produces high tides in the oceans and water tides in the soil is very high, and the moon, which is dark, gets progressively lighter. . . . By placing short germinating seeds in the ground two days before the lunar tide forces are greatest, the seed has time to absorb water. The force exerted on the water in the seed helps create a "tide" that helps burst the seed coat in conjunction with the forces produced by the swelling of the seed.

Sunset Western Garden Book

If you're gardening in the seven western states, this is a wonderful book to own. Nearly 300 pages of it is a "Western Plant Encyclopedia" including both



Sunset Western Garden Book
1967; 448pp.
$7.95 postpaid
from:
Lane Magazine and Book Co.
Menlo Park, CA 940
or Whole Earth

Aerial Photography of Farmland and Satellite Imagery

The Agricultural Stabilization and Conservation Service (ASCS) of the US Department of Agriculture (USDA) has aerial photographs of all of the nation's major cropland areas (excluding Alaska, that's about 79% of the country.) If you want to see or buy a picture of your farm from the air, first visit your county ASCS office. Use their indexes to locate the roll and exposure numbers that have what you want. Then order from the addresses below.

In addition, you can purchase imagery from both the Earth Resources Technology Satellite (ERTS, Pg. 459) ——from 570 miles up, and from Skylab—— from 270 miles. Ask for the two information sheets (WL-5 and WL-7) and the pricelist—— Form ASCS 441-2.

Eastern states aerial photography from:

Eastern Aerial Photography Laboratory
ASCS-USDA
45 South French Broad Ave.
Asheville, North Carolina 28801

Western states aerial photography, and all satellite imagery, from:

Western Aerial Photography Laboratory
ASCS-USDA
2505 Parley's Way
Salt Lake City, Utah 84109

Bio-Dynamic Literature List

28 titles in the current list (many are pamphlets and reprints of back issues of the magazine **Bio-Dynamics***), including all of the titles reviewed on Pg.* **53** *("Biodynamic Gardening") except for* **Agriculture** *by Rudolf Steiner. Send a self-addressed, stamped envelope to:*

Biochemical Research Laboratory
Threefold Farm
Spring Valley, NY 10977

How to Sharpen and Use an Axe and Get the Most Out of Fuel Wood

I wish there were little pamphlets this clear and complete for every task in life. Never grind an axe; it only thins and weakens the edge. Elliott uses a carborundum file, and just on the cheeks of the axe.

—RM

How to Sharpen and Use an Axe and Get the Most Out of Fuel Wood
J. A. Elliott
1973; 6 pp.
$ .50 postpaid
from:
Garden Way Publ.
Charlotte, VT 05445
or Whole Earth

It isn't the dull edge that keeps the axe from getting into the wood—— it is the thick, abrupt cheeks. Keep the cheeks away from the edge and the edge will take care of itself. . . Really, all the edge generally gets is a slight touching up just before I put the axe away.

Drip Irrigation

High-tech irrigation, much of it pioneered by Israeli farmers, with limited applications: Good Points—— it conserves water (constant dripping from pin-sized holes, great for arid regions with scarce water), it limits soil erosion (good on steep hill-sides), it helps with water penetration in soils with a limited ability to absorb water. Bad Points—— it requires a pressure system and clean water (one-time installation, if you get dirt clogging the drip valves, it's all over); on trees especially, it will tend to cause the feeder roots to stay near the surface where they are

The Organic Gardener
Catharine Osgood Foster
1972; 234pp.
$2.95 postpaid
from:
Vintage Books
Random House
457 Hahn Rd.
Westminster MD
21157
or Whole Earth

are somewhat helped; and beets and turnips are very much helped from heavy applications.

- **Zinnia** (trap plant for Japanese beetle; rebuffs cucumber beetle, tomato worm)
- **Tomatoes** (repel asparagus beetle)
- **Strong herbs:** sage, thyme, catnip, feverfew, hyssop, rue, artemisia, etc. (repel many pests)
- **Parsley** (protects hybrid tea roses)
- **Ladybugs** (devourer of many pests, including many larvae)
- **Peas and carrots** thrive together, as do **potatoes and beans**, parsnips and peas, beets and broccoli, radishes and cucumbers.
- **Turnips** (repel aphids, spider mites, flies)

common and scientific names. In addition, 24 climate zones are described. They are quite specific. Except for annuals and some house plants, each entry in the Encyclopedia includes the climate zones where the plant can be successfully grown. Sunset pulled out all the stops for this book, and it shows.

—RN

Cut like this, while bud is tight and plump.

ARTICHOKE. Perennial vegetable with landscape value. Zones 8, 9, 14-24. A big ferny-looking plant with an irregular, somewhat fountainlike form— to 4 ft high, 6-8 ft. wide. Leaves are silvery green. Big flower buds form at tops of stalks; they are the artichokes you cook and eat. If not cut, the buds open into spectacular purple-blue, 6-in. thistlelike flowers which can be cut for fresh or dry arrangements.

watered, rather than going downward for water, so if you start drip irrigating and then stop, you may have problems. We'd like input on low-cost do-it-yourself versions.

—RN

Catalogs free
from:
Controlled Water Emission Systems
585 Vernon Way
El Cajon, CA 92020

or
Chapin Watermatics Inc.
368 N. Colorado Ave.
Watertown, NY 13601

The Nursery-Manual

This is an old book, first published in 1896, revised the last time in 1922. Its age is an advantage to the organic gardener. When Bailey wrote, there were no sure-fire fungicides and herbicides, no rooting hormones, no mist systems. To be successful, you had to watch your plants closely, be careful and systematic, and have an intuitive, practical understanding of how plants grow. So often modern technology is offered as a substitute for observation and sensitivity to the growth processes of plants. Much is lost when that is the case. Bailey leads you into a world where there is no technological substitute for care and active involvement.

Some of the material is a bit out of date or peculiar. But it doesn't matter. **The Nursery-Manual** *is loaded with information, illustrations and pictures of how to do all kinds of plant propagation. The sections on cuttings and on layering are particularly useful. There is a good index (223pp.) of plants and how they are propagated, that answers the question: How and when do I propagate this? You can have fun with this book.*

—Steve Kaffka

The Nursery-Manual
L. H. Bailey
18th Printing 1967; 456pp.
$7.95 postpaid
from:
The Macmillan Company, Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

Many thick and heavy leaves may be used as cuttings. Leaf-cuttings are most commonly employed in the showy-leaved begonias, in succulents, and in gloxinias, but many plants can be propagated by them. Even the cabbage can be made to grow from leaf-cuttings. The bryophyllum is one of the best plants for showing the possibilities of propagation by leaves. If one of the thick leaves is laid on moss or sand in a moist atmosphere, a young plant will start from nearly every pronounced angle in the margin.

Fig. 115. Tough and brittle wood.

In making *softwood cuttings*, the first thing to learn is the proper texture or age of shoot. A very soft and flabby cutting does not grow readily, or if it does it is particularly liable to damp-off, and it usually makes a weak plant. Too old wood is slow to root, makes a poor stunted plant and is handled with difficulty in many species. The ordinary test for beginners is the way in which the shoot breaks. If, on being bent, the shoot snaps off squarely so as to hang together with only a bit of bark, as in the upper break in Fig. 115, it is in the proper condition for cuttings; but if it bends or crushes, as in the lower part of the figure, it is either too old or too young for good results. The tips of the shoots of soft-wooded plants are usually employed, and all or some of the leaves are allowed to remain.

Fig. 116. Soft cuttings (× ½).

The cuttings are inserted in sharp sand to a sufficient depth to hold them in place, and the atmosphere and soil must be kept moist to prevent wilting or "flagging." The cuttings should also be shaded for the first week or two. It is a common practice to cover newly set cuttings with newspapers in the heat of the day. A propagating-frame is often employed.

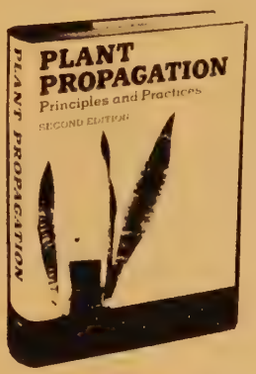
Fig. 117. Coleus cutting (× ½).

Plant Propagation

This is a very current, comprehensive and technical book. Many of the techniques and methods described are appropriate to the horticultural industry and the professional technician, but there is a good deal of information that is simple and straightforward. Anybody who is seriously interested in plants— in what goes on inside them and what measurable influences control their growth— will find this book extremely valuable.

Start with **The Nursery-Manual** *and work up to* **Plant Propagation.** *Absorbing too much scientific and technical information before you have any personal experience can often hinder your ability to learn from plants directly.*

—Steve Kaffka
[Suggested by Ed Clinker]



Plant Propagation
(Principles and Practices)
Hudson T. Hartmann &
Dale E. Kester
1959, 1968; 702pp.
$17.25 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs,
NJ 07632
or Whole Earth

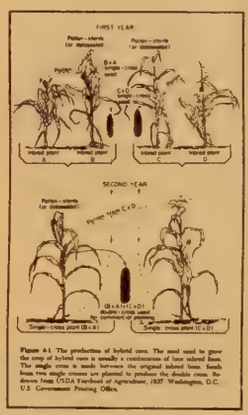


Figure 4-1 The production of hybrid corn. The seed used to grow the crop of hybrid corn is usually a combination of four inbred lines. The single cross is made between the original inbred lines. Seeds from two single crosses are planted to produce the double cross. Redrawn from USDA Yearbook of Agriculture, 1937. Washington, D.C. U.S. Government Printing Office.

Hybrid varieties have become an increasingly important category of cultivated plants within recent years. These are the progeny produced by the repetitive crossing of two or more parental lines that are maintained either (a) by seed, such as inbred lines, or (b) asexually, such as clones. To produce commercial hybrid seed, the parental lines must be grown side by side so that cross-pollination takes place between them. The seed produced (the F_1 progeny of the cross) is the seed used to grow commercial crops. This cross must be repeated every time the seeds are produced.

Hybridization between two inbred lines is known as a *single-cross*. Combining two single-crosses produces a *double-cross*, the usual case with hybrid corn varieties. . . Hybrid plants were first utilized in the production of field corn, and almost all the field corn grown in the United States is of this type.

Compost

A small pamphlet, but it contains all you need to know in order to make and use good compost out of diverse materials and under a wide range of conditions. Koepf is one of the genuine experts in the fields of soil fertility and improvement via organic technique. Anything he writes is worth reading.

—Steve Kaffka

Compost
(What it is, How it is made, What it does)
H. H. Koepf
1966; 18pp.
$1.30 postpaid
from:
Biochemical Research Laboratory
Threefold Farm
Spring Valley, NY 10977

The Carbon: Nitrogen Ratio of the Compost Mixture

The most important information about just how rich or poor a compost mixtures is, is indicated by the ratio of carbonaceous materials and nitrogen it contains. This is the so-called carbon:nitrogen ratio. Too little nitrogen causes a compost to work slowly. The product will be rather poor. More nitrogen than required for optimum fermentation is likely to cause nitrogen losses from the pile. It very likely also creates odor problems, since ammonia is the chemical compound by which nitrogen escapes into the atmosphere. The carbon:nitrogen ratio is expressed in a figure like 25:1 or simply 25. This means that the compound in question contains 25 times as much carbon as nitrogen. These are examples of the carbon:nitrogen ratio of materials or mixtures used for composting: sawdust 150; peat moss 50; straw, cornstalks, etc., 50-150; hay from legumes 15; leaves from alder and ash 20-30; leaves from oak, birch, maple, etc., 40-60, animal droppings 15; manure with bedding material 20-25.

The ideal initial mixture for composting 25-30
Finished compost of any kind 14-20
Stable humus in fertile soils 9-14

The Apartment Gardener

The word "gardener" in the title distinguishes this book from others on houseplants. **The Apartment Gardener** *takes indoor gardening beyond interior decoration. Reading it, you are soon aware of the environment of the rooms you live in—— their humidity, air circulation, and insect life. From there, it becomes possible to manipulate these conditions with artificial light, water spraying techniques and companion planting—— all covered in detail. While the focus is on decorative plants, there is sufficient information to take off with indoor vegetables as well. And there's a whole section on bromeliads for bromeliad freaks.*

—RM

The Apartment Gardener
Florence & Stanley Dworkin
1974; 400pp.
$1.50 postpaid
from:
New American Library, Inc.
1301 Ave. of Americas
New York, NY 10019
or Whole Earth

SPECIAL "PLANT" LIGHTS

In general, forget them. They are an expense that is unjustified by any evidence we've had shown to us.

We have friends who swear by one special tube or another, and other friends who laugh at them. We've found that the combination of "cool white" and "warm white" (half and half) works just fine. If you want to try the special tubes, go ahead, but they are usually much more expensive, without a commensurate return.

•

Herbs, such as basil, produce better under lights than in the sun: in the sun they go quickly to flower, but under lights, while you will get some flowers, you get excellent leaf growth.

Raise Vegetables Without a Garden

Almost any container that will hold soil will grow food—— vegetables, fruit, melons, peanuts. Ingenuity is the most important factor; good drainage is next. This book can get you started.

—RM
[Suggested by Leanna Landsman]

Raise Vegetables Without a Garden
George "Doc" & Katy Abraham
1974; 88pp.
$2.95 postpaid
from:
Countryside Books
A.B. Morse Co.
200 James St.
Barrington, IL 60010
or Whole Earth

To get the pineapple plant to form into fruit here's a trick to try: (1) Place a plastic bag over the plant so air can be trapped inside. (2) Inside the bag place an apple (any variety will do). The apple releases ethylene gas fumes which are trapped by the plastic tent. These fumes are harmless to man, but will force the pineapple to flower and form fruit. After the fifth day remove the plastic tent and soon you'll see new leaves starting from the center of the plant. And before long, you'll see rows of pineapple fruit appearing on the bottom of the new leaves. Put a stake in the pot to support the plant. When the pineapple is ripe, cut it off and serve it fresh.

Mother Earth's Hassle-Free Indoor Plant Book

Basic and easy, and surprising that this book that's half cartoons should give so much important information that many "serious" houseplant books overlook.

—RM

Mother Earth's Hassle-Free Indoor Plant Book
Lynn & Joel Rapp
1973; 114pp.
$3.95 postpaid
from:
Tarcher, Inc.
9110 Sunset Blvd.
Los Angeles, CA 90069
or
Hawthorn Books
260 Madison Ave
New York, NY 10016
or Whole Earth

For the most part, indoor plants are grown in greenhouses, and the heat of the greenhouse is the major influence on the growth rate of the plants. The hotter the greenhouse, the faster the plant will grow, thus the cheaper it will become to the consumer. But, alas, the less chance it will have to survive the transition from the torrid humidity of its birthplace to the natural, generally drier atmosphere of a home.

Plants grown with care and attention in a cool greenhouse naturally take a great deal longer to attain marketable size. Thus, because time is money, a premium-quality plant will always be more expensive than a second-grade plant, even though the two plants may look exactly alike.

•

You should never feed a sick plant. . . Any time you suspect a plant is sick, be aware that plant food of any kind will have a damaging rather than a healthful effect on the weakened root system. Remember, you must always feed sparingly at best, since the slightest overfeeding can cause irreparable harm. Be sure to discard "leftovers." Food mixture cannot be saved from feeding to feeding.

Houseplants and Indoor Landscaping

Buy this one for the pictures. 248 color photographs with descriptions of common houseplant varieties for $3.95!

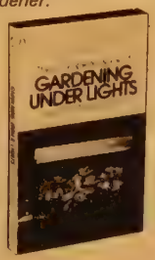
—RM

Houseplants and Indoor Landscaping
Muriel Orans
1973; 80pp.
$3.95 postpaid
from:
Countryside Books
A. B. Morse Co.
200 James St.
Barrington, IL 60010
or Whole Earth

The Complete Book of Gardening Under Lights

All the specifics of how different types of plants perform under lights. McDonald is an expert writer and gardener.

—RM



The Complete Book of Gardening Under Lights
Elvin McDonald
1965; 220pp.
$1.50 postpaid
from:
Popular Library
355 Lexington Ave.
New York, NY 10017
or Whole Earth

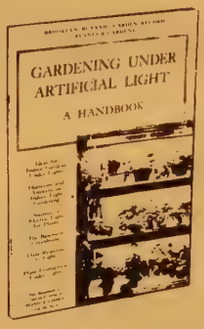
All methods of vegetative reproduction can be carried out under fluorescent setups having 20 to 74 watts of illumination or more, fourteen to sixteen hours daily. Plant parts root more rapidly when placed in a closed container such as a covered terrarium, a plastic- or glass-covered container of clear glass or plastic found in a kitchen—— refrigerator dishes, bread boxes, casseroles, or cheese boxes. (Heat a pointed instrument such as a nut or ice pick and make ventilation and drainage holes in tops and bottoms of plastic containers.) If beads of moisture appear inside the cover, remove it, wipe dry, then replace.

If you want to propagate a single leaf or cutting you can give it a humid atmosphere by slipping a drinking glass or a plastic Baggie over it.

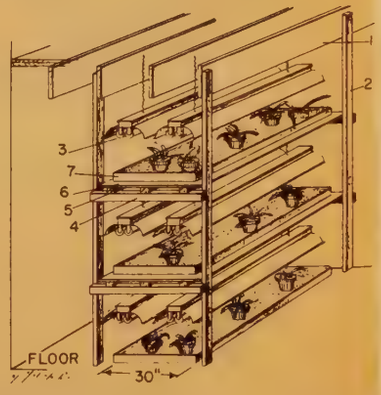
Gardening Under Artificial Light

According to this book, there are two types of artificial lighting for plants, both done best by flourescent lamps. Photosynthetic lighting supplements natural light in rooms and greenhouses, especially during fall and winter months. Photoperiodic lighting can create day and night for flowers, houseplants, and a few kinds of vegetables. Flowers can be forced into bloom, seeds or bulbs germinated, and strawberries brought to fruit with careful lighting. Many plants, given a brief light bath during the night, require less intense light during the day. **Gardening Under Artificial Light** *provides the uncomplicated facts, but not the detail of* **The Complete Book of Gardening Under Lights.**

—RM



Gardening Under Artificial Light
(A Handbook)
Brooklyn Botanic Gardens
1970; 65pp.
$1.50 postpaid
from:
Brooklyn Botanic Gardens
1000 Washington Ave.
Brooklyn NY 11225
or Whole Earth



Frequent temperature check-ups may be required when tubes are close together as too much heat results for the plants' welfare.

HYDROPONICS *by Kathleen Whitacre*

Hydroponics grows food in places where crops were formerly marginal or non-existent—— blowing sand deserts, soilless mountain sides, disease infested soils, and high-rise apartment balconies. It also uses 30 times less water than growing in soil(!), not to mention you don't need any gasoline for your roto-tiller. You can grow yourself a hydroponic tomato from the directions in just about any of the books or pamphlets around; however to really know what you are talking about hydroponically speaking you should read everything you can get your hands on. I recommend beginning at the Public or University library rather than the book store. **The Bengal System** is especially simple and straightforward, and includes a section on use of organic materials in nutrient solutions.

Hydroponics: The Bengal System
(4th edition)
J. Sholto Douglas
1970; 167pp.
$1.75 postpaid
from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410
or Whole Earth

Hydroponics as a Hobby; Circular 844 (Pg. 59) $ .25
from:
Univ. of Illinois
College of Agriculture
Extension Svs. in Agriculture
and Home Economics
Urbana, IL 61801

Hydroponic Gardening
Raymond Bridwell
1972; 224pp.
$6.95 postpaid
from:
Woodbridge Press
Box 6189
Santa Barbara, CA 93111

Beginner's Guide to Hydroponics
James Sholto Douglas
1972; 156pp.
$2.95 postpaid
from:
Drake Publishers Inc.
381 Park Ave. South
New York, NY 10016

Soilless Culture (Pg. 59)
T. Saunby
1953
$2.45 postpaid
from:
Transatlantic Arts Inc.
Trade Department
North Village Green
Levittown, NY 11756

LIBRARY BOOKS

Soilless Growth of Plants, 2nd ed.
C. Ellis & M.S. Swaney
1947, revised by
T. Eastwood

The Water Culture Method of Growing Plants Without Soil
D. R. Hoagland &
D.I. Arnon, 1950

Successful Gardening Without Soil
C. E. Ticquet, 1952

The Complete Guide to Soilless Gardening
W. F. Gericke

Soilless Culture Simplified
A. Laurie
1940

Growing Plants Without Soil
(Vermiculaponics)
M. Bentley, 1955

Commercial Hydroponics
M. Bentley

(3 copies in U.S.A. Library of Congress has it.)

Suspicion

Hydroponics: I'm suspicious. A good gardner told me that when you feed the plants chemicals this way, without soil, they don't get the trace elements. If I were a plant I'd rather get my nourishment from roots in the soil, rather than intra-venous injections. Also, what about the energy costs in producing those artifical fertilizers?

—Lloyd Kahn

Chief benefits

1. Higher crop yields than are obtainable in ordinary soil.
2. Relative freedom from soil diseases.
3. Quicker growth owing to plentiful supply of nutrients.
4. Reduction in growing area by means of closer planting.
5. Very consistent crops.
6. Operating and maintenance costs are less than in horticulture.
7. Standard methods making work easy.
8. No hard manual labour or rough toil.
9. Better control of crops and planting.
10. Weeds are practically non-existent.
11. Excellent quality of fruits and flowers.
12. Good drainage and no waterlogging.
13. Economy of labour and lower wages bill.
14. No dirt and no smells.
15. Absolute cleanliness and no risk of catching diseases borne in the animal excreta used as soil manure.
16. Some crops may be grown out of season, thus capturing luxury markets.
17. Fruits of high mineral content or special dietary value can be produced at will.
18. Supplies of expensive organic manures are not necessary.
19. Less fertilizers are needed.
20. Water can be economized in, and the best use made of irrigation facilities.
21. Crops can be grown in places where ordinary horticulture or agriculture is impossible.
22. Hydroponics gives an immediate return. There is no long period of waiting as there must always be with soil.
23. The efficiency of a hydroponicum can be maintained indefinitely at negligible cost.
24. Wastage of fertilizers never occurs.
25. It is simple to operate, economical to install, easy to maintain, and suitable, with local modifications, for any district.
26. A minimum of equipment is required.
27. Full use can be made of indigenous materials and substitutes.
28. By adhering properly to simple rules, success is certain.

3

THE DEVELOPMENT OF A NEW FRIENDSHIP

The abandoned newsstand where Captain Mediafreak lives is furnished sparsely: color TV set; AM-FM radio; hi-fi stereo, records and earphones; tape recorder; photography equipment; motion picture camera, tripod and cans of film; stacks of newspapers, magazines and underground comic books, including complete collections of *Zap* and *Slow Death*.

Plus a telephone, which he uses mostly to call up radio talk shows, which is what he's in the middle of doing at the moment.

"So the reason I'm against all censorship is that it's diametrically opposed to the essential purpose of education. People have to be allowed to make up their own minds."

"All right, thank you, caller," a professional voice interrupts. "Appreciate your point of view."

Captain Mediafreak hangs up, dials the same number and is put on hold. When he goes on the air again, he uses a different voice, somewhat nasal in quality.

"I'd like to disagree with that previous gentleman. I'm for censorship. My wife uses the television as a babysitter, you know, and there's an awful lot of violence. Our children are beginning to take all the violence for granted, and there are virtually no options. That's not entertainment, it's brainwashing. And in my opinion, brainwashing should be censored...."

Flashiebackie:

Young Lieutenant Mediafreak has all of his arms and legs. His curly hairlocks are shorter. He sits in the front row of a movie theater, watching his first Andy Warhol film. It's called *Audience*, and consists entirely of leisurely panning over reactions of the people in each audience waiting for the scene on the screen to change. Therefore it's different at every showing.

When he sees himself, Lieutenant Mediafreak immediately opens his guitar case and takes out an electric saw. He proceeds to saw off his left leg, hearing himself scream in utter pain, as surrounding faces on the screen express their encouragement.

"Right on!" the audience yells.

Then his right leg.

"Right off!" the audience yells.

Then his left arm.

"Right arm!" the audience yells.

Lieutenant Mediafreak faints. The electric saw falls on the ground, further dismembering the bloody limbs already lying there as though it were in heat.

An usher calls the police.

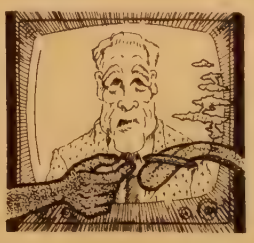
The police call the newspapers.

The New York Daily News headline:
Self-Mutilator Denies
It Was a Drug Freakout

The New York Times headline:
Perpetrator of Public Masochism Claims
Artistic Statement Was Only Intention

The New York Post headline:
Movie Victim Sues Warhol
For Invasion of Privacy....

It never occurs to Harry Reasoner that while he is delivering his Commentary on the ABC Evening News, Captain Mediafreak is initiating his house guest into the rite of cannabis-sharing.



Tongue Fu inhales the smoke carefully; coats his lungs with resin; then, in the very act of exhaling, gently passes the joint, which he holds, not between his fingers, but curled in the tip of his long parched tongue.

That night they decide to go out for dinner and the theater to celebrate their new friendship. Tongue Fu carries the basket from which Captain Mediafreak navigates their course. They arrive at an elegant hotel on Park Avenue.

Since they are the only ones in the elevator, Tongue Fu takes the liberty of pressing the button for the seventeenth floor with his tongue. As the numbers light up, he counts out loud.

"...nine...ten...eleven...twelve...fourteen— where is thirteen?"

"Listen, there's a lot of places— office buildings, apartment houses, hotels— where they had the architect skip the thirteenth floor because it's supposed to be bad luck. There's even airplanes where they don't have a number thirteen seat. It's the same principle. They don't wanna lose any business. They're just catering to superstitious people, is all. The worst part of it is, the people who live on the fourteenth floor— they think they're getting away with it."

Walking along the corridor, they stop at a door that has a cart in front of it, containing a pair of trays with leftover food from Room Service. They share these mostly-eaten delicacies in the stairwell. Dessert is found on the floor below.

Then they depart for the theater, where a revival of *No, No, Nanette* is playing. They wait outside until the first act intermission. Mingling with the audience in the lobby, they return inside for the second act, finding an available seat in the balcony. Tongue Fu holds the basket on his lap.

"Why do they call it legitimate theater?" he asks on the way home. "Is there such a thing as illegitimate theater?"

"Absolutely," replies Captain Mediafreak. "Real life. Or maybe the movies."

"I have never been to a movie."

"You oughta see *Deep Throat*. Some people say that's illegitimate."

"I have heard the phrase. Other boys at the monastery in Japan used to whisper about deep throat as a very specialized form of yoga."

They stop to watch a potato knish maker. His style strikes Tongue Fu as being more mellow than the pizza maker, perhaps because his task is less hectic.

A wizened panhandler straggles by and sputters, "Can ya spare a quarter for a Pina Colada?"

"I am sorry, but I do not have money. But come join us. Regard the potato knish maker aid the potato to achieve knishhood."

"Aw, never mind," says the panhandler, only to be replaced by a neatly-suited thin black man wearing a fedora and politely offering to sell a copy of *Muhammad Speaks*.

From his basket, Captain Mediafreak pipes up: "No, thanks. I'm a subscriber."

[Continued, page 519]

Shelter

Lloyd Kahn (LK), who can't stop building houses and editing books about it, returns as editor of Whole Earth's Shelter Section.

Former major proponent of domes, Lloyd is now their foremost critic. "They leak." (Embarrassingly, Lloyd's own dome does not leak. Redwood shakes and careful construction.)

—SB

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Shelter

In 1964 a book called **Architecture Without Architects** *started a revolution in thinking about building design and construction. This book completes the revolution. Editor Lloyd Kahn has built three of his own houses and worked on innumerable others. He used to edit the "Shelter" section of the* **Whole Earth Catalog**. *His books* **Domebook I** *and* **Domebook II** *encouraged the reader participation that led to this book, a quantum jump deeper into building essence and practice than the previous works. The use of photographs (by co-editor Bob Easton) could change bookmaking. I'd call it a Bible of grassroots design, of homemade homemaking, and the measure now of how excellent a homemade book can be.*

–SB

FIRST GEODESIC DOME, 1922.

Shelter
Shelter Publications
1973; 176pp.
$6.00 postpaid

from:
Mountain Books
P.O. Box 4811
Santa Barbara, CA 93103
or Whole Earth

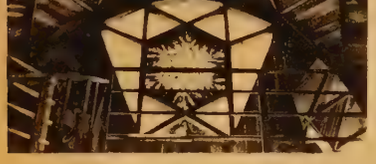
He looked upon us as sophisticated children–– smart but not wise.

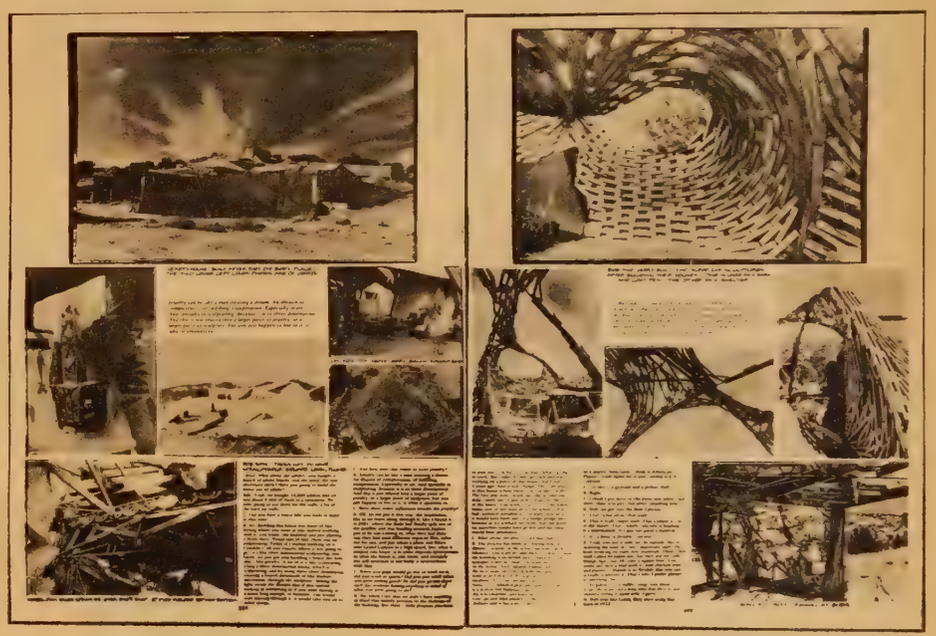
Saxton T. Pope *(said of Ishi)*

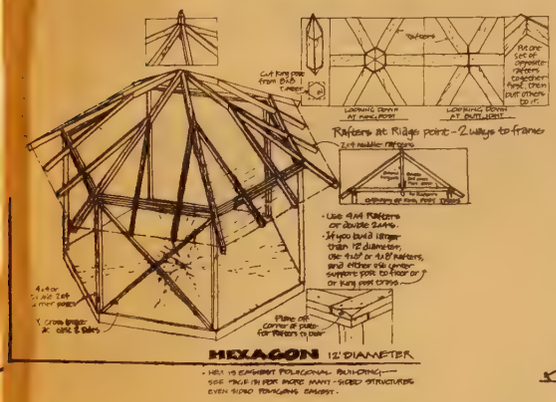
Metaphorically, our work on domes now appears to us to have been *smart*: mathematics, computers, new materials, plastics. Yet reevaluation of our actual building experiments, publications, and feedback from others leads us to emphasize that there continue to be many unsolved problems with dome homes. Difficulties in making the curved shapes livable, short lives of modern materials, and as-yet-unsolved detail and weatherproofing problems.

We now realize that there will be no wondrous new solution to housing, that our work, though perhaps smart, was by no means *wise*. In the past year, we have discovered that there is far more to learn from wisdom of the past: from structures shaped by imagination, not by mathematics, and built of materials appearing naturally on the earth, than from any further extension of whiteman technoplastic prowess.

•







CROSS SECTION OF DOUBLE WALL TENT

Building small to start will give you basic experience. A small shed can be a place to live in or store things while you study the land and decide what to do next. You can watch the rising and setting of sun and moon, study outlook and orientation, learn about seasonal temperatures and wind direction, vegetation, rainfall: the many considerations that should help you decide what kind of house will suit your needs and fit the site.

The small building can then be expanded as needed. *You* will change during the building process, and building in increments gives you flexibility and adaptability as you go.

Building is hard work, costly and relatively permanent. Unlike a painter or potter, the builder cannot throw away an unsatisfactory result. There it stands, for all to see, for many years. Thus there is wisdom, especially for a new builder, in starting small, simply, and heeding local advice.

•

A builder can take two very important steps to save energy: build small and insulate well.

•

After about 10 years of building I've realized how simple and unpretentious a home can be. Building a house needn't (usually shouldn't) be a *trip*. Time and again I've been led by an abstract concept into a lengthy or impractical building project when a chicken house or small barn design would have been far better. So now when people ask for advice, I tell them to study the farm buildings near their site. They can serve as models for a house, with minor adaptations. One story, 2 x 4 framing, vertical walls, lightweight, roll roofing. Well insulated, with a fireplace to sit by on cold nights. Used wooden doors and windows. Kitchen that opens out into the garden. Quick to build so you can get on with life.

•

We decided to build a big dome before we ever saw the land we were to build it on. We bought lumber at the lumber mill and shingles at the shingle store. Now, with far less money and far more sense we think of building our sleeping shelters out of WHAT IS HERE. One shelter will be built out of stone (which is plentiful here) others will be made from rammed earth, adobe bricks, etc. Floorboards, doors, moulding etc. can be gleaned from old abandoned buildings. We have learned that with less money and more scavenging we are building better and better structures. This seems to hold true in all areas of our lives. In terms of food, shelter, health care, education, communication: the less we are dependent on the mainstream culture for materials, goods and information the more high quality these aspects of our lives become.

What's good about 90° walls: they don't catch dust, rain doesn't sit on them, easy to add to; gravity, not tension, holds them in place. It's easy to build in counters, shelves, arrange furniture, bathtubs, beds. *We* are 90° to the earth. Not important how much a building weighs. It *is* important how much a bird weighs, but a building doesn't have to move or fly. Certainly an adobe house weighs tremendously. So? Would it be better if it were built of plastic of 1/100th the weight and 10,000 times as polluting in its manufacture?

•

Calling Earth a spaceship is like stepping out into a clear night in New Mexico and saying, "Wow, it looks just like the planetarium."

•

Driving down a small country lane in Norfolk, this building in the middle of a distant field. A peaceful *presence*, at rest with its surroundings.
After hundreds of years, abandoned, sinking gracefully back into the landscape its materials originally came from.
Vines climbing up the walls, in through the windows. Soon it will fold in the middle, kneel, in time become a mound in the field. Cycle completed.
Inside it's cheerful and light, unlike many other dank abandoned houses where death lingers.
Generations of shelter, births and deaths, sons and daughters.
Countless fires built, meals cooked, needs tended.
What will the houses we are building now look like in 300 years?

•

. . . Building this house was more of like feeling where you went as you started working with it, you know, the material and just playing it from there. Visual sort of feel, there was no preplanning. . . .

•

Shelter Network

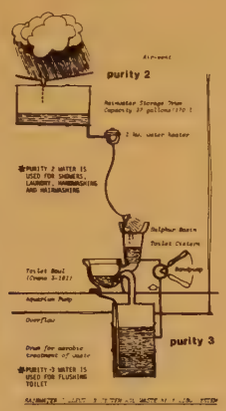
Photographers, travelers, builders: send us a card if you want to contribute to our next book **Shelter 2**, *due 1976 or so. This book can be a guide to what we're looking for. We'd like reports on local building types, the process of construction, what can be done inside dwellings, city tenant survival, and an important aspect of shelter often overlooked: maintenance, or tending. We'll pay contributors. If you can contribute, gather material, hold on to it, send us a card, and we'll be in touch.*

–LK
Shelter Publication
P.O. Box 279
Bolinas, CA 94924

The Ecol Operation

A hell of a lot of original design and use of materials (asbestos super-tiles out of sewer pipe, sulfur lock-blocks, modular lobs, etc) went into this impressive project by students at McGill University, Toronto. This is the first home that I've seen which is more systemically designed than a travel trailer.

—SB



The Ecol Operation
(Ecology + Building + Common Sense)
1972; 100pp.
$4.00 postpaid

from:
Minimum Cost Housing Group
School of Architecture
McGill University
Montreal 101
Province of Quebec
Canada

1. Building with renewable resources—— such as timber or vegetable fibres—— which do not consume the earth's stock of non-reusable materials.

2. Building with materials which would otherwise cause pollution when discarded as industrial waste; instead of burning or stockpiling sulphur wastes from oil, copper, zinc, refineries, etc., these could be used in construction.

3. Building with materials that can be re-cycled rather than discarded at the end of the building's life.

4. Using pollution-free wind energy to produce electricity.

5. Using the minimum of water resources for washing and cleaning, saving large amounts of water by fine-droplet spraying.

6. Putting to use the power of wind-produced electricity to extract water from the air by the phenomenon of condensation.

7. Using solar energy to purify polluted or sea-water.

8. Making use of the sun for cooking and heating water thus requiring no fuel.

9. Re-cycling water and separating it by function for (1) drinking and cooking, (2) hand washing and showering, and (3) toilet flushing, depending on the purity.

10. Using all available rainwater.

11. Not using the earth's permanent natural resources which have taken millions of years to accumulate and are rapidly being depleted by overuse.

12. Avoiding waste by relating the size of all building components through modular coordination.

Architecture for the Poor

Egyptian architect Hassan Fathy calls for architects to work with poor people, helping them design and build their own homes with local techniques and materials. Mud brick in the desert, wood where it grows, rock where fields must be cleared of it. In an inspiring personal history, Fathy describes the thought, planning and construction of a Moslem village in the upper Nile in the 1940's. Families were consulted individually and their needs incorporated into design of their homes. Craftsmen, trained on the site, built a series of handsome mud brick buildings: homes, schools, theater, marketplace and mosque. Though the project was not completed, it generated much useful information on adobe, dome and vault construction and natural cooling techniques. Moreover, it demonstrated Fathy's vision that the poor of the earth, with architectural help and crafts training, can build housing they can afford, and that is aesthetically satisfying.

—LK

[Suggested by Art Boericke)

This architectural excursion was, for me, a hunt after mud brick vaults. After Aswan, we went to Luxor, where I was especially pleased to examine the granaries of the Ramesseum—— long, vaulted storehouses, built of mud brick 3,400 years old. It seemed to be a fairly durable substance.

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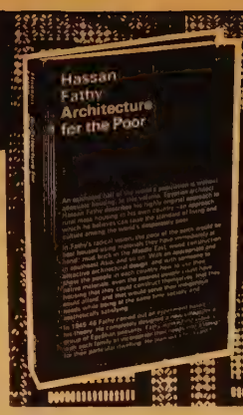


Architecture for the Poo
Hassan Fathy
1973; 233pp.
$10.95 postpaid
from:
University of Chicago Press
11030 S. Langley
Chicago, IL 60628
or Whole Earth

Mushrabiya *(oriel window with latticework screen) at Sehen House*

One interesting technical discovery emerged from the Mit-el-Nasara project, and that was how to make bricks quickly. Because of the acute distress of the villagers we had to build the village as quickly as possible, and so I was ready to use any means of saving time. Dr. Ytzhar, a soil mechanics consultant to the Baum-Marpin Company, came to help us, and he suggested speeding up brick manufacture by mixing the dry constituents—— earth and sand—— in a mechanical cement mixer with a carefully controlled quantity of steam. The steam would penetrate the lumps of earth much better than water could, and would envelop each particle in a film of water, thus achieving instant and complete amalgamation of earth and water in exactly the right proportions without the need to make excessively wet mud and then leave it for days to dry.

•

Foundations and roofing are the two biggest technical and economic problems in cheap rural housing.

Shelter in Africa

This is the second in Paul Oliver's series of fine books on indigenous, humble (therefore unchronicled) shelters of the world. There are more than 5,000 tribes in Africa, and a corresponding variety of building types. An excellent editor's introduction on the history, present status, and changing state of African housing—— followed by 16 essays (with photos and drawings) by travellers who studied various African housing types. Beautiful Zulu huts, woven by women, that resemble large seedpods and blend with surroundings. Nomad tents made fr the hair of the animals that pack the tents. Squatter settlements, and studies of what has happned to the tribes as they are forced to move off their lands and toward the cities.

—LK

Shelter in Africa
Paul Oliver, Ed.
1971; 240pp.
$15.00 postpaid
from:
Praeger Publishers, Inc.
P.O. Box 1323
Springfield, MA 01101
or Whole Earth

A Hausa custom which harks back to pre-Moslem times, though it is no longer universal, is for a dead person to be buried under the floor of his hut, which is then abandoned and left to collapse. After the roof and parts of the walls have broken down, the roofing poles of deleb palm are removed and used as fire wood or, if in good condition, for new construction. The walls disintegrate quickly, formi a small mound which marks the site of the former hut for several years; but when a new hut is necessary this mound o earth may be used to make bricks for the new building.

Front view of tent open for day use.

Freedom to Build

Each year more than 150,000 families build their own homes in America—— either doing the actual building, or acting as contractors in overseeing construction. According to 1968 census figures, 20% of new single-family residences were owner-built. These homes are generally smaller, cheaper, and better built than developer-built housing, and almost half of them are built with cash—— no mortgage payments.

This is the only book of its type I've seen. It was picked up by London's **Architectural Design** *(Pg. 88) magazine about a year ago and is overdue for recognition in the U.S. It is about the history, capability, and value of people providing their own shelter, and contains descriptions of various families and the houses they have built. An interesting fact is the far greater freedom of the poor people in a country like Peru, as compared to lower-income families in the U.S., in providing their own homes.*

—LK

Freedom to Build
(Housing by and For The People)
John F.C. Turner & Robert Fichter, Eds.
1973; 301pp.
$2.95 postpaid

from:
Collier-Macmillan
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

The poor can *be* wards of the state, however, only when they are a minority. When they are a majority, as they are in Peru or India, the state simply cannot afford the cost of distributing massive amounts of institutionalized goods and services which have the effect, as in the United States, of appropriating the autonomy of the poor. This explains the relative freedom of housing activity by the poor in a country such as Peru, and the almost total lack of such freedom for the urban poor in industrialized societies. Thanks to their autonomy, many of the Latin American urban poor make better use of their limited resources and sometimes are better housed, in absolute terms, than their wealthier North American counterparts.

LEARNING ARCHITECTURE

by Lloyd Kahn

ar.chi.tec.ture n 1: the art or science of building...

Recently I did a slide show at a nearby college. A student came up afterwards and asked if I knew of any good architecture schools in the country. I didn't.

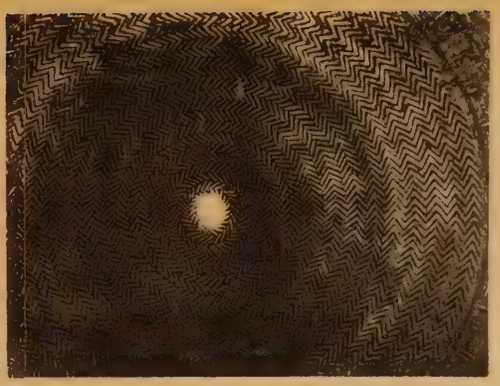
We went across the street for some coffee and as we sat I told him what I'd do if I were him and wanted to learn building design: spend some months reading high-quality books on vernacular building as well as the world's great architecture. Then set off with sleeping bag, backpack, camera and notebook for a year or two of travel—— studying, sketching, recording, listening, learning. Shelter being so basic, people of all lands seem willing to talk about it. They are proud of handwork (where it still exists) eager to show an interested visitor buildings, local ingenuity Study humble, indigenous buildings as well as some monumental feats, letting circumstance and intuition guide the way. Sooner or later return home, put notes together, develop film, ponder what has been learned. In between travel and study—— preferably before—— work for a builde and learn to draw.

To learn building you'll probably have to search around to

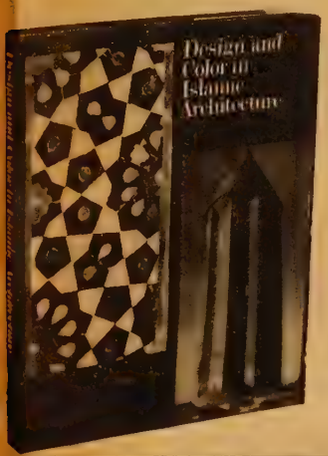
Design & Color in Islamic Architecture
Persian Architecture

Two books on glorious architecture, of a period in building when there was deep respect for tradition, yet a continual spirit of creativity. Towers, domes, mosques that show a rare blending of structure and embellishment, monumental scale and delicate detail. These buildings are whole and balanced, with an interior/exterior harmony seldom seen in the Gothic cathedrals (which are covered with large barn-type roofs). The Islamic book has exquisite color plates, is one of the very finest books on great architecture. The Persian book is more widely known, has an excellent history of Persian architecture, many good black and white photos.

—LK
[Islamic book suggested by Art Boericke]



The tomb at Sangbast (A.D. 997-1028; A.H. 387-419) is generally believed to have been built by the Governor of Tus, Arslan Jadhib. Eric Schroeder points out in his analysis of the construction of this building that "a brick ring twenty-five courses deep acts as abutment or weight on the haunch and perhaps this is the oldest Persian work embodying the knowledge that a dome is stronger if lighter at the crown." A chevron pattern is found on the inside of the dome, and the walls are decorated with a design in incised plaster.



Design & Color in Islamic Architecture
(Afghanistan Iran Turkey)
Sonia P. Seherr-Thoss &
Hans C. Sherr-Thoss
1968; 312pp.
$27.50 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster MD 21157
or Whole Earth

With regard to the vault or dome placed over a square plan, the principal problem is how to manage the transition from square below to circle above. A dome cannot simply be placed upon a square base, for either it will project over the four sides of the square while it rests on the corners or it will rest on the sides but fall short of the corners. In either case a system of ugly bracketing or an inserted crude mass of mortar will have to be added to make do. For centuries this problem baffled the very competent Roman engineers, who did not provide an attractive or even certain solution.

Persian Architecture
Arthur Upham Pope
1965; 288pp.
$25.00 postpaid
from:
George Braziller, Inc.
One Park Ave.
New York, N.Y. 10016
or Whole Earth

The earliest solution was reached by Persian engineers and masons who gradually realized that the question as posed was impossible. The answer required the development of a third section, a zone of transition, which involved building an arch across each corner thereby reducing the square to an octagon. If necessary, small arches could be built again to bridge the corners of the octagon thus producing a sixteen-sided figure which nearly approximated the ring of the dome. The slight corbelling necessary to smooth out the small discrepancies was not noticeable. In the earliest examples of this type of construction, the squinch or pendentive is rather crude and compressed, the arch creating a small trumpet shaped hollow in each corner or angle. The history of this device, the squinch, is essential to the story of Islamic architecture; the variety of solutions is the story of slow development, inventiveness and engineering skill.

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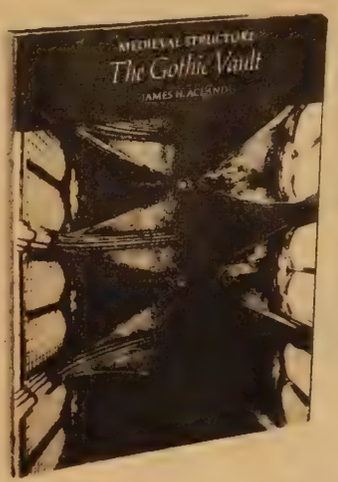
Medieval Structure: The Gothic Vault

James Acland has put together the best book I've seen on buildings of Western Europe. With builder's eye and scholar's dedication (14 years gathering material) Acland shows the earliest primitive shelters in various climates, and the evolution of building forms that eventually led to the great Gothic vaults.

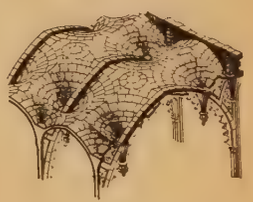
It begins with a clearly illustrated history of building: **Primitive Frame**, *which explains early domes, vaults, timber frames, more complicated structures. There is a fascinating account of how rectangular structures were developed in Neolithic (early agricultural) times from the circular earth lodge, retaining central posts. This type structure—— greatly enlarged—— now roofs the Gothic vaults.*

Good treatment in the rest of the book of all types of vaults: folded, ribbed, cellular; flying buttresses, fan vaults, curvilinear ribs. Outstanding photos and clear drawings that show construction details of the various shapes.

—LK



Medieval Structure: The Gothic Vault
James H. Acland
1972; 254pp.
$25.00
postpaid
from:
Univ. of Toronto Press
Univ. of Toronto
Toronto, M5S 1A6
Canada
or Whole Earth



Robert and William Vertue, from 1503-19, built the elaborate vaults over the Henry VII chapel at Westminster Abbey as shells springing from points on the transverse arch rings.

•

Essentially, the late Gothic designer took the lattice weave of the primitive hut, translated it into a delicate grid of curved masonry ribs, braced the ribs with a superposed shell, and then perched this delicately poised static contrivance up to one hundred feet above the floor on slender piers. It is little wonder that a rigidly braced transition between rib and pier became the special preoccupation of the medieval engineer.

SHELTER

find someone to take you on. Start as a laborer if need be; you'll pick up the skills as you go. Keep working on and off until you know something about building. It's a skill useful for a lifetime.

Draw as much as possible. Books can be helpful, but nothing is better than a compatible teacher. There might be someone at a college (this could mean a trek from school to school) who would be the right one. Or you might find a job working for an architect: he'd teach you drawing, you'd help him do drafting and get a salary that increased along with your proficiency.

Study, travel, building, drawing—— not in any particular order—— could make you into a fine architect, although without the credentials. It could also make you a misfit in today's western world of building and design, but who knows how long it will all last.

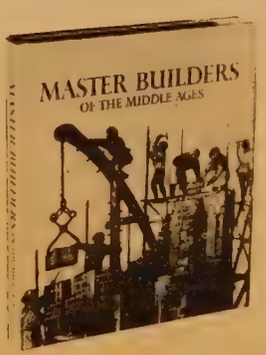
I didn't have all this together as we sat there on our second cup of coffee, but I've been thinking about it since. Because with what architecture has become, it's hard to learn the skills on a human scale, and most colleges are of little help.

I guess what I've done is outlined an alternative (that word again) course in architecture. For those who can't afford a good school or find one, it would be a vital way to learn the art and science of building.

Master Builders of the Middle Ages

The story of what happened in Europe after the Crusaders (early missionaries) discovered the dazzling architecture of the Middle East: the Gothic cathedrals, the masons who built them, the secrets of building kept in masonic lodges, a period in history when the church and monarchs could not control their builders, and the early seeds of architecture.

—LK



Master Builders of the Middle Ages
David Jacobs
1970; 153pp.
$5.95 postpaid
from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

As soon as he realized how important he was becoming, the mason quickly asserted and flaunted his independence. He asked for higher pay, and he got it. He dressed garishly, favoring showy silks and satins and huge capes of bright solid colors, lines with gaily patterned prints. He let his hair grow long and cultivated an unruly beard—— at a time when short-cropped hair and a clean-shaven face were signs of piety and self-sacrifice.

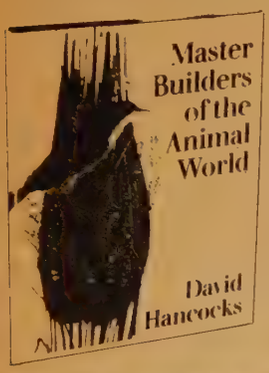
In 1230 the Church decided that it had had enough. The bishops realized that they had allowed things to go so far because of their own competitiveness; thus divided, they had been powerless. Now they were determined to put aside their rivalries and unite. Only through a show of unity could they shake the masons of their worldly ways and force them to end their defiance of the Church. An order went out from every abbey and cathedral: The masons (for a start) were to shave off their beards and cut their hair short. The masons refused.... The order would not be obeyed. In fact, it must be rescinded. If it were not, the brotherhood of masons would systematically burn to the ground every last church, monastery, and cathedral in France.

Considering the enormous power of the Church, this was an incredible ultimatum. Nevertheless, the bishops backed down. Still long-haired and bearded, the masons gave the word to resume work, and the cathedral crusade continued.

Master Builders of the Animal World

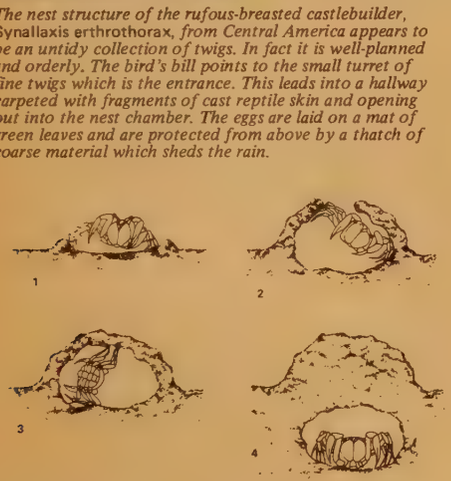
Master builders: Beavers, bees, bower birds, weaver birds, spiders, termites and the Malayan soldier-crab. Animals always build with what is available, and local, and can be studied, rather than copied.

–LK
[Suggested by John Bradbury]



Master Builders of the Animal World
David Hancocks
1973; 144pp.
$8.95 postpaid
from:
Harper & Row, Publishers, Inc.
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

The nest structure of the rufous-breasted castlebuilder, Synallaxis erthrothorax, from Central America appears to be an untidy collection of twigs. In fact it is well-planned and orderly. The bird's bill points to the small turret of fine twigs which is the entrance. This leads into a hallway carpeted with fragments of cast reptile skin and opening out into the nest chamber. The eggs are laid on a mat of green leaves and are protected from above by a thatch of coarse material which sheds the rain.



The Malayan soldier-crabs live between the tide marks on coastal sand flats. As the tide rises each crab buries itself in a bubble of air until the waters recede. Small pellets of sand are first pushed outwards and upwards until a dome has been formed to enclose the crab, which then travels deeper by scraping sand from the floor and plastering this on to the ceiling.

A System of Architectural Ornament

Some secrets of embellishment from Frank Lloyd Wright's master.

–LK

A System of Architectural Ornament
Louis H. Sullivan
1967; 69pp.
$4.95 postpaid
from:
The Eakins Press
155 E. 42nd St.
New York, N.Y. 10017
or Whole Earth

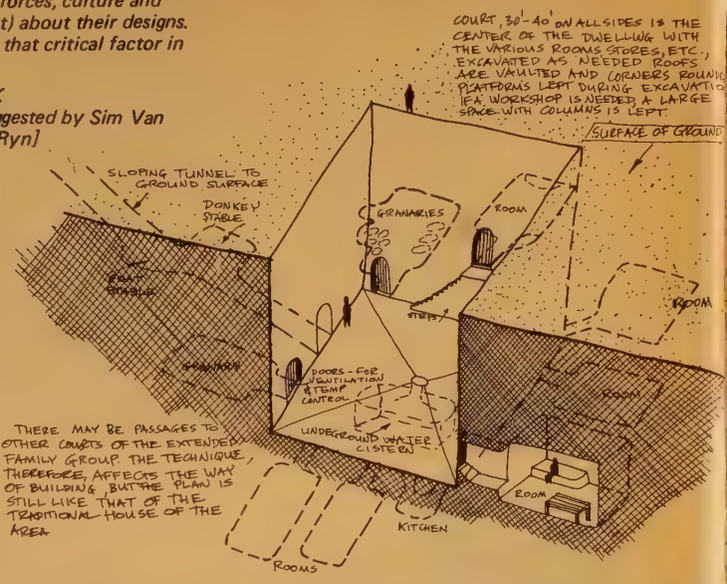
House Form and Culture

A relatively unknown and thought-provoking book on primitive and vernacular forces, culture and materials that bring (brought) about their designs. Valuable and instructive for that critical factor in house design: approach.

–LK
[Suggested by Sim Van der Ryn]

House Form and Culture
Amos Rapaport
1969; 146pp.
$2.50 postpaid
from:
Prentice-Hall, Inc.
Englewood Cliffs, N.J. 07632
or Whole Earth

Cutaway view of Matmata dwelling, Sahara. (Adapted from a number of sources, primarily Haan in Architects' Yearbook 11 *and* New Frontiers in Architecture.*)*



It could be argued that, if we consider hostility of environment and available resources, the problems faced by the Eskimo are not unlike those involved in the design of a space capsule. The difference is less than one would imagine.

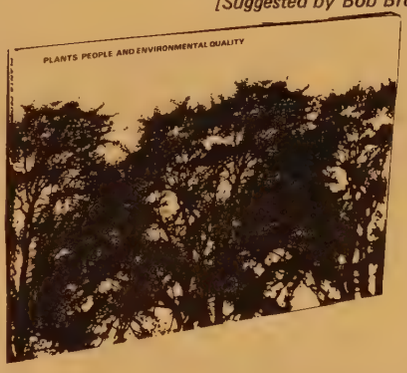
•

The pueblo looks like a land form because the close relation of house form and landscape reflects the harmony of man and nature. The whole landscape is sacred, as is the house, and the whole environment influences all of Pueblo life. In fact, Pueblo Indians beg forgiveness every time they fell a tree or kill a jack rabbit. Corn growing is for them a religious act and an essential part of the total spiritual life. It is this attitude which affects the house, its form, siting, and relation to the land, and helps explain why such buildings enhance rather than damage the landscape.

Plants/People/And Environmental Quality

How to use plants to dampen sound, purify the atmosphere, articulate space, provide privacy, and control sun, wind, rain, and temperature. Important for architects, designers, owner-builders. Important concepts to know before designing a structure.

–LK
[Suggested by Bob Brooks]



It is a known fact that plants absorb noxious gases, act as receptors of dust and dirt particles, and cleanse the air of impurities. As air pollution increases, the importance of plants becomes increasingly apparent. Plants deter soil erosion by the cover they provide and the spread of their root systems.

•

In the daytime, the ground temperature in a forest may be as much as 25° cooler than the top of the tree canopy. A vinecovered wall is cooler than a bare wall. Evergreen trees planted close to a wall of a building will create a dead-air space, and insulate the building from abrupt temperature changes. Plants at the base of slopes create a cold air or frost pocket.

Plants/People/And Environmental Quality
Gary O. Robinette
1972; 140pp.
$4.35 postpaid
from:
Superintendent of Documents
U.S. Government Printing Office
Washington D.C., 20402
or Whole Earth

The Natural House

It is always good to review one's premises before starting a project. This collection is a tight presentation of most of our tacit assumptions about home design and construction by their author. Honesty in materials, simple space use, straight-forward construction and a realistic attempt at low cost housing are presented here. It is a chance to review popular styles and attitudes, as well as a source of specific ideas and techniques. Using many pictures and plans of well designed homes these collected writings bring all the abstract philosophy down to a personal and specific level. Design for the site and the owner, with simplicity and beauty.

–Peter Calthorpe

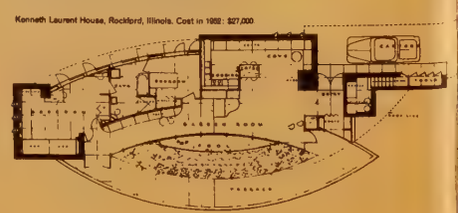
The Natural House
Frank Lloyd Wright
1970; 224pp.
$2.95 postpaid
from:
The New American Library, Inc.
1301 Avenue of the Americas
New York, N.Y. 10019
or Whole Earth

A stone building will no more *be* nor will it *look* like a steel building. A pottery, or terra cotta building, will not be nor should it look like a stone building. A wood building will look like none other, for it will glorify the stick. A steel-and-glass building could not possibly look like anything but itself. It will glorify steel and glass. And so on all the way down the long list of available riches in materials: stone, wood, concrete, metals, glass, textiles, pulp, and plastics; riches so great to our hand today that no comparison with ancient architecture is at all sensible or anything but obstruction to our modern architecture.

In this particular, as you may see, architecture is going back to learn from the natural source of all natural things.

•

To me air conditioning is a dangerous circumstance. The extreme changes in temperature that tear down a building also tear down the human body.



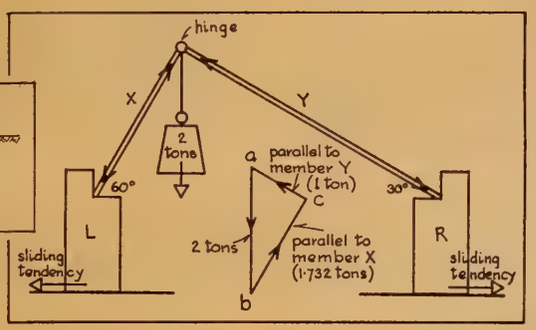
The Elements of Structure

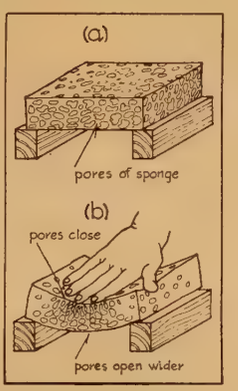
Kind of like Salvadori and Levy's **Structural Design in Architecture**, *but much better. Lots of sketches (usually 2 per page), and not many numbers. Almost as if Ken Kern had written a book on structural engineering.*

—Bob Cunningham

The Elements of Structure
W. Morgan
1973; 296pp.
$3.80 postpaid
from:
Sir Isaac Pitman & Sons Ltd.
Pitman House, Parker Street
Kingsway, London, England

Aircraft Hangars at Orbetello, Italy

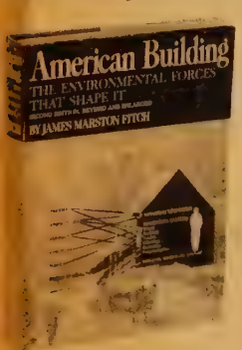




American Building

Fitch criticizes architects for not dealing with environmental forces. He finds that our highly developed technology and equipment for manipulating the natural environment have led architects to ignore natural forces as a factor in design. Air conditioning has allowed gigantic buildings of glass facing summer sun, etc. This is an important study of what has gone wrong, why, and what can be done about creating a more human architecture, a more harmonious relationship between buildings and their environment.

—LK
[Suggested by Bob Brooks]



American Building
(The Environmental Forces That Shape It)
James Marston Fitch
1972; 349pp.
$15.00 postpaid
from:
Houghton Mifflin Company
2 Park St.
Boston, Mass. 02107
or Whole Earth

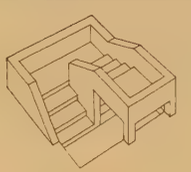
Rooftop wind scoops, Hyderabad, Sind. A rare climatic paradox—— high humidities superimposed on Arabian Desert temperatures—— makes ventilation mandatory. These wind scoops are oriented to prevailing breezes.

Design Drawing Experiences

A good workbook on learning to draw. The author did all the drawings (many) with a $1 Schaeffer cartridge fountain pen. Drawing as an aid to design, rather than grand architectural renderings.

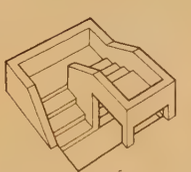
—LK
[Suggested by Bob Brooks]

Design Drawing Experiences
William Kirby Lockard
1973; 111pp.
$7.50 postpaid
from:
Pepper Publishing
2901 East Mabel
Tucson, Arizona, 85716
or Whole Earth



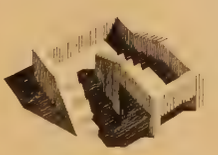
LINE

- spatial edges and planar corners defined with lines



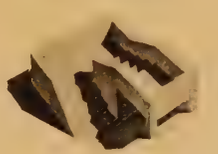
LINE SPATIALLY PROFILED

- spatial edges and planar corners defined with lines
- spatial edges should be profiled
- the more an edge would move visually against its background as the observer moves toward it the heavier the line should be.



TONE OF LINES

- spatial edges and planar corners defined by a change in line spacing
- tones made by even-spaced lines
- shading direction should respond to vertical or horizontal orientation of the surfaces



TONE

- spatial edges and planar corners defined by a change in tone - no lines
- shading direction should respond to vertical or horizontal orientation of the surfaces

SHELTER

The Nature of Design

David Pye seeks a basic theory of design and disputes much current jargon. Form follows a lot more than function.

—LK
[Suggested by Bob Brooks]

The Nature of Design
David Pye
1964, 1967; 96pp.
$2.75 postpaid
from:
Reinhold Publishing Corporation
430 Park Ave.
New York, N.Y.
or Whole Earth

Anyone can verify by simple observation two important facts. The first is, that whenever humans design and make a useful thing they invariably expend a good deal of unnecessary and easily avoidable work on it which contributes nothing to its usefulness. Look, for instance, at the ceiling. It is flat. It would have been easier not to have made it flat. Its being flat does not make you any warmer or the room above you any quieter, nor yet does it make the house any cheaper; far from it. Since there is a snobbism in these things flattening a ceiling is called workmanship, or mere craftsmanship; while painting gods on it or putting knobs on it is called art or design. But all these activities: 'workmanship', 'design for appearance', 'decoration', 'ornament', 'applied art', 'embellishment', or what you will, are part of the same pattern of behaviour which all men at all times and places have followed: doing useless work on useful things. If we did not behave after this pattern our life would indeed be poor, nasty and brutish.

The second fact, which can be verified by simple observation, is that all useful devices have got to do useless things which no one wants them to do. Who wants a car to get hot? Or to wear out its tyres? Or to make a noise and a smell?

•

Although in many fields designers quite frequently make inventions, designing and inventing are different in kind. Invention is the process of discovering a principle. Design is the process of applying that principle. The inventor discovers a class of system—— a generalisation—— and the designer prescribes a particular embodiment of it to suit the particular result, objects, and source of energy he is concerned with.

•

It is a most diverting spectacle to see the experts in work study exercising their considerable ingenuity to find the one cheapest way of doing operations which could perfectly well be dispensed with; for example, getting shiny surfaces on furniture. The 'one best way' of doing things like that is not to do them.

•

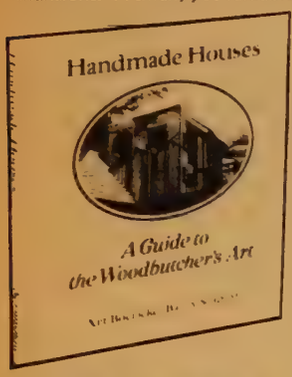
Because there has not been any coherent theory of the nature of design, and because it is evident that what a thing does has some bearing on what it looks like, 'function' has been loosely used to cover any or all the factors which limit preference. It has diverted attention from the fact that those influences are many, disparate, and of various effect, and particularly from the fact that economy, not physics, is always the predominant influence because directly and indirectly it sets the most limits. 'Function' apparently covers economy as well as anything else you please. It is a wonderful hindrance to any understanding of design and will die hard, for it makes a fairly intricate subject look simple.

•

Handmade Houses

Architects, look out. Funky cottage builders are out there solving building and design problems once thought to be only in your domain. The saw mightier than the pencil? The case is presented here with the finest quality color prints, small owner-built houses presented in a manner usually reserved for Palladian mansions. A small, yet valuable book.

—Bob Easton



Handmade Houses
(A Guide to the Woodbutcher's Art)
Art Boericke/ Barry Shapiro
1973; 87pp.
$12.95 postpaid
from:
The Scrimshaw Press
149 9th St.
San Francisco, Calif. 94103
or Whole Earth

A little place to get away from things or practice yoga—— what you might call a meditation room with roots. And then a much more formal one that's been caught in the first light of breaking day.

The Poetics of Space

There's been so much written in the last few years about the external construction of shelters. This book is about the house as interior construct, the house of dreams, the "dream house" that we're always building until the day we die, and the house of reverie which is the house we were born in, our first earthly home where "a lamp is always waiting in the window, and through it the house too is waiting" for each of us to come in, curl up, and dream. The external metaphor Bachelard uses for the house is the nest that the bird constructs with his own body, using his breast for a tool. He (the bird) suggests that a house is built by and for the body, that it takes form from the inside. "This being the case," writes Bachelard, "If I were asked to name the chief benefit of the house, I should say: the house shelters day-dreaming, the house protects the dreamer, the house allows one to dream in peace." The county ought to write that into their building code.

—Lewis MacAdams, Jr.

The Poetics of Space
Gaston Bachelard
1964; 241pp.
$2.95 postpaid
from:
Beacon Press
25 Beacon St.
Boston, Mass. 02108
or Whole Earth

Housed everywhere but nowhere shut in, this is the motto of the dreamer of dwellings.

•

If we go deeper into daydreams of nests, we soon encounter a sort of paradox of sensibility. A nest—— and this we *understand* right away—— is a precarious thing, and yet it sets us to *daydreaming of security.*

•

To begin with, the corner is a haven that ensures us one of the things we prize most highly—— immobility.

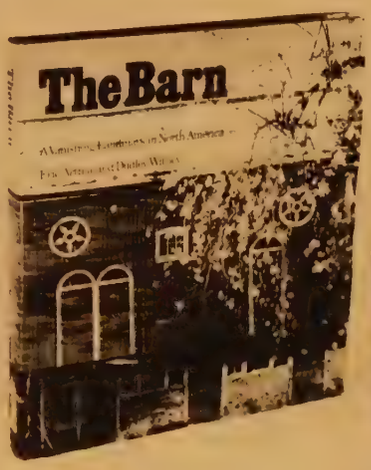
The Barn

If you're on property with a fine old barn, or if you're interested in the techniques and history of North America's finest (grandest) framing system, **The Barn** *is worth maybe having ($25) and certainly viewing.*

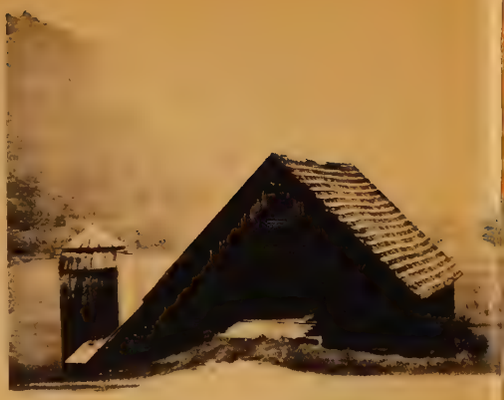
The book is excellent on the matter of taxonomy: Dutch barns, English barns, Pennsylvania barns, Connected barns, Polygonal barns, etc. Excellent also on history: barn design is traceable to upturned Iron Age ships and to ancient Basilican churches. The authors are "architectural" in their aesthetic appreciation; they pay due attention to the agricultural functioning and design innovations of various barns; they are less instructive about the dynamics of evolution in this splendidly vernacular and diverse medium. Happily, they cover the extraordinary barns of eastern Canada as well as northeastern U.S. The barns of the Deep South and Western States are not well explored.

The major resource in the book is scads of glorious photographs, many in color, many of fine structural detail.

—SB



The Barn
Eric Arthur & Dudley Whitney
1972; 256pp.
$25.00 postpaid
from:
New York Graphic Society Publishers, Ltd.
Greenwich, Conn. 06830
or Whole Earth



The bay in its architectural sense goes back more than two millennia. When the Celts in Britain in the fourth century B.C. used their crucks in the building of a house or barn, they spaced them in bays. It is a term quite unrelated to bay windows or oriels, and may describe the spacing of arches in the cathedrals of the Middle Ages or the intervals between steel columns in a modern office building.

•

a) The swing beam was an entirely North American element in the English barn and came about because of the extension of the threshing floor by a bay with a loft overhead for the storage of fodder. The appearance of many an English ba gives no indication that within is a swing beam of awesome dimensions, dating from a time when nearby pine forests produced trees of gigantic size. For an unusually bountiful harvest, an additional floor was put over the threshing floo The square holes show where the joists were fitted for its support.

Dwelling

Self-built sheds and shacks in the woods, many by women. Two good features of this book: women talking about design and construction of their own homes (haven't seen that elsewhere), and beautiful photos. The text could use some serious editing, but the photos and much of what is said will be useful to anyone thinking of building a small wood frame house. Ideas for shapes, interiors, how to think of home design from the inside.

—LK

Dwelling
River
1974
$5.50 postpaid
from:
Freestone Publishing
Box 357
Albion, Calif. 95410
or Whole Earth

I built to my size because I wanted to be able to reach everything. Also—— I'm not eight feet tall; what did I want with eight foot ceilings?! So I made the ceilings 6'3".

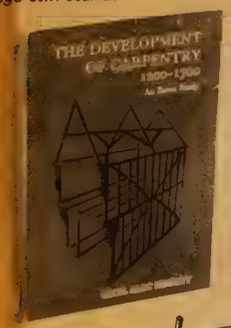
•

I built my 12 X 16 box on my platform, but when I was about 3/4 of the way through, I thought, oh! it's too tiny! I need to have a little something for a kitchen. So I built another little deck and then added a 7 X 8 addition for the kitchen. In fact, that part was the most fun for me; standi in the middle of the space and thinking, now let's see. . . where can I push it out now? I added foundations and little decks where I wanted extensions.

The Development of Carpentry, 1200-1700

Many good clear drawings of mortise and tenon carpentry in the county of Essex, England. Chronological examination of development and perfection of various timber joining techniques. Some of the wooden buildings built over 700 years ago still stand.

—LK



The Development of Carpentry 1200-1700
(An Essex Study)
Cecil Alec Hewett
1969; 232pp.
$10.00 postpaid
from:
Augustus M. Kelley Publishers
305 Allwood Rd.
Clifton, N.J. 07012
or Whole Earth

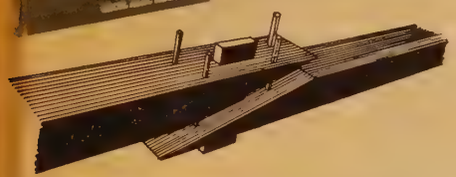
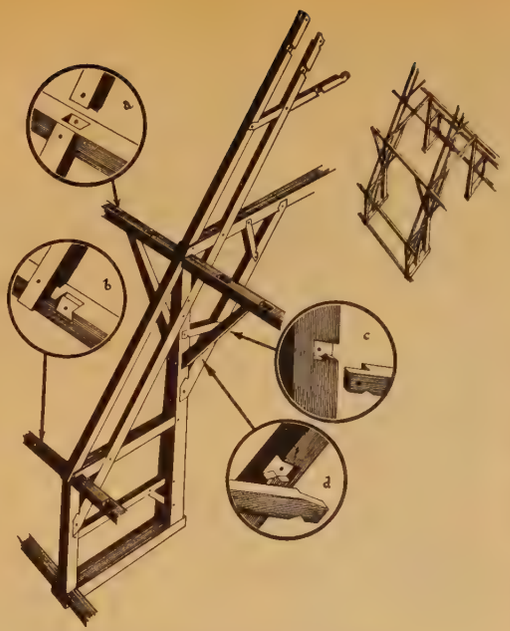


Fig 79 Through-splayed scarf with four face-pegs and one face-key.



The Barley Barn, Cressing Temple, detail of joints (Built c. 1200)

Illustrated Handbook of Vernacular Architecture

A concise review, with many good drawings and photos of cottages, farm buildings, mills, inns and manor houses of England. Heavy timber framing, thatch, wattle and daub, tile and stone work. Windows, doors, staircases, design and plans. Excellent for building ideas as well as vernacular history, useful in building restoration.

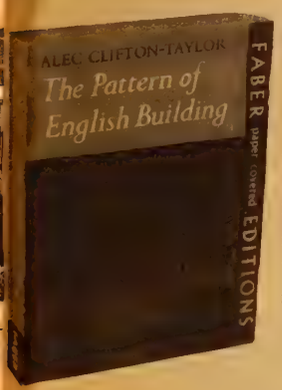
—LK

Illustrated Handbook of Vernacular Architecture
R.W. Brunskill
1970; 230pp.
$8.95 postpaid
from:
Universe Books
381 Park Ave. South
New York, N.Y. 10016
or Whole Earth

The Pattern of English Building

A comprehensive and detailed history of the building materials of England: stone, granite, slate, marble, flint, brick, tiles, earth, wood, thatch, plaster, metal and glass. A key to understanding the charm and variety of English buildings (predecessors of much American building), upon which ". . . the eye may dote, and the heart take its fill."

—LK



The Pattern of English Building
Alec Clifton-Taylor
1972; 466pp.
$7.50 postpaid
from:
Faber & Faber, Ltd.
3 Queen Square
London, England

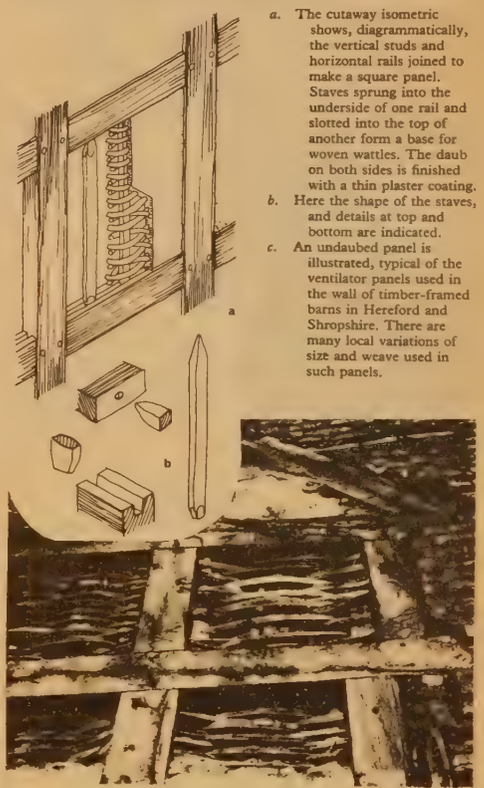
Men have made bricks for at least six thousand years. The earliest bricks were sun-baked, not hardened in the heat of a fire, and these bricks, used extensively in ancient Egypt and Babylonia, can still be seen in many parts of the world; in Spain, Argentina, the Indian reserves in the United States and elsewhere, the Spanish word *adobe* (signifying an unburnt brick dried in the sun) is familiar. Such bricks can be found in England, as will be described in Chapter 11, and have the advantage of being cheaper than burnt bricks, but they are best suited to drier climates than ours. Fired bricks were already being produced in the Near East by 3000 B.C., and, needless to say, it was this more durable form which chiefly found favour with the Romans, by whom the first bricks were introduced into this country.

The typical Roman bricks are broad and flat, and more like tiles than the bricks which are made to-day. Dimensions vary considerably: 12x6x1¼ ins. are typical, 18x12x1½ ins. not uncommon: and some are square. The thinness of these bricks, which is sometimes only 1 in. and rarely as much as 2 ins., enabled them to be very well burnt, which is the principal reason for their remarkable durability.

The great enemy of most of the sedimentary rocks is pollution of the atmosphere.

•

Timber Walling: Wattle and Daub Infill



a. The cutaway isometric shows, diagrammatically, the vertical studs and horizontal rails joined to make a square panel. Staves sprung into the underside of one rail and slotted into the top of another form a base for woven wattles. The daub on both sides is finished with a thin plaster coating.

b. Here the shape of the staves, and details at top and bottom are indicated.

c. An undaubed panel is illustrated, typical of the ventilator panels used in the wall of timber-framed barns in Hereford and Shropshire. There are many local variations of size and weave used in such panels.

Early Domestic Architecture of Connecticut

History and many good drawings of well-built Connecticut houses of the 17th and 18th centuries. One of the best books available on mortise and tenon construction. Plans, elevations, framing details, window and door drawings, home-made hardware.

—LK

Early Domestic Architecture of Connecticut
J. Frederick Kelly
1963; 210pp.
$4.00 postpaid
from:
Dover Publications
180 Varick St.
New York, N.Y. 10014
or Whole Earth

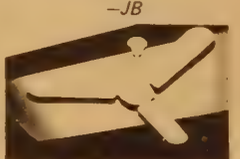
The Hempstead house of New London, the western part of which was built in 1643, is one of the earliest wooden houses standing to-day in the state of Connecticut. The pitch of the original roof of this house, as may be seen in the attic, where the old gable rafters are still in place, was fifteen inches to the foot, a very steep pitch.

Old-Time Ceiling Fan

Slow turning and quiet, these paddle bladed ceiling fans gently stir air to better distribute heat and cool and keep things just moving a bit. They're nice to watch and to sit near too. *(See Grainger's, Pg.* 138 *for another fan).*

—JB

Old-Time Ceiling Fan
$78 + UPS Freight
from:
Delaware Electric Imports
111 S. Delaware Ave.
Yardley, PA 19067



Costs no more to operate than a light bulb (far less than the smallest air conditioner)

To be hung only on 9' or taller ceilings.

56" diameter 5 speed, white enamel. Spray any color you like!

No oiling ever (maintenance-free sealed bearings)

Great for places that can't be air-conditioned such as laundries and bakeries.

Cream Rises
CARPENTRY

Fundamentals of Carpentry *Best* 96
Home and Workshop Guide to Sharpening *Keep 'em Sharp* 143
Hand Woodworking Tools *Clear* 144
Canadian Wood Frame House Construction *Free* 95
Heavy Timber Framing *Solid* 514
Reader's Digest Complete Do-It-Yourself Manual *Encyclopedia* 518

Wood Frame House Construction

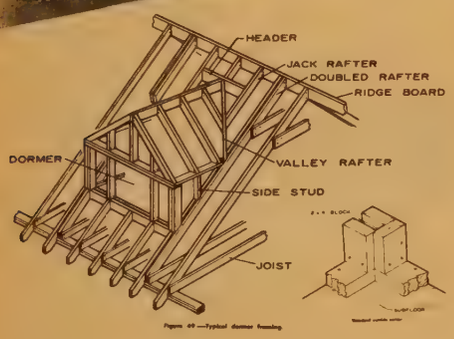
Construction details for a wood framed house that can be easily understood. Chapters on floor and wall framing are especially simple and clear. Plans and designs are beyond the scope of this book but what's presented are a good use of materials and the simplest methods of standard house construction.

—John Bradbury
[Suggested by Bob Easton]

A good companion book to **Fundamentals of Carpentry**, *which has better foundation instructions.*

—LK

Wood Frame House Construction
L.O. Anderson
1971; 178pp.
$2.75 postpaid
from:
Craftsman Book Company of America
124 South La Brea Ave.
Los Angeles, Ca. 90036
or Whole Earth



Heavy Timber Construction

Practical information on some uncommon but useful wood constructions. Sections include post and beam, arches, bridges, trusses, laminated structural members, pole and log construction, towers, water tanks, water fronts, and retaining walls. There is also a chapter on layout principals: detailing some uses of the square, templates and jigs; determining the construction of rafters, polygons, spirals, and ellipses; theoretical and practical geometry; curves and sheathing a dome. Although the buildings used are large the construction principals can be adapted to smaller structures.

—John Bradbury

Heavy Timber Construction
Fred R. Oberg
1972; 408pp.
$8.75 postpaid
from:
American Technical Society
848 East 58th Street
Chicago, Illinois 60637
or Whole Earth

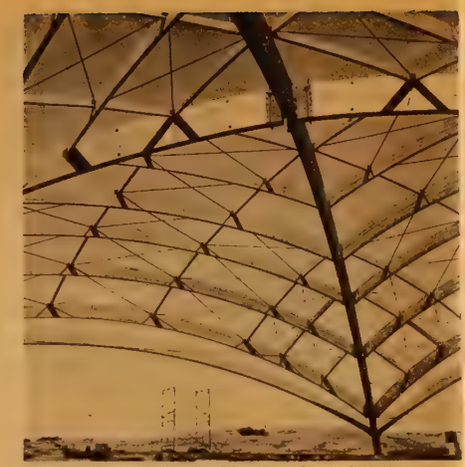
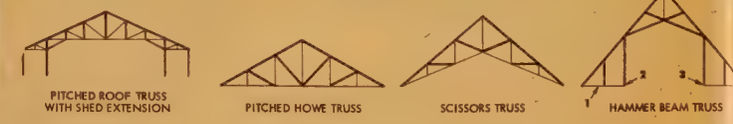


Fig. 26. Portion of a glued laminated radial rib dome. Rilco Laminated Products, Inc.

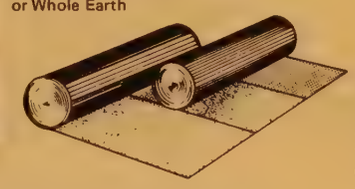


Roofing Simplified

Basic application procedures for roll roofing, asphalt shingles, wood shingles, slate, metal, canvas and fiberglass roofs. Includes uses of flashing, gutters, skylights, dormers, simple scaffolds, a safety harness and more. Clear basic techniques for a weather tight roof and also building procedures which will make your work safe and efficient.

—John Bradbury

Roofing Simplified
Donald R. Brann
1972; 98pp.
$1.50 postpaid
from:
Directions Simplified, Inc.
Division of Easi-Bild Pattern Co., Inc.
Briarcliff Manor, N.Y. 10510
or Whole Earth

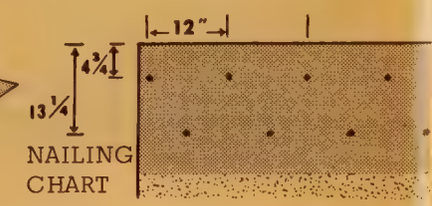


One of the easiest, quickest, and least complicated methods of applying a good roof fast is with mineral faced, double coverage, roll roofing. Each course laps 19". This mineral faced roofing comes 36" wide. The lower half of the surface is covered with mineral coated pellets, the upper half is smooth. Each roll covers 51 sq. ft.

Double coverage roll roofing may be applied when pitch is as low as 1" per foot. Always use the size, kind, quantity and space nails manufacturer recommends. The entire first course is embedded in asphalt cement and nailed or stapled every 4 feet, or space manufacturer recommends. Roll roofing with a roofer's roller to bond course to roof. Allow first course to project 1" over edge of eave or keep it flush with starter strip.

A 19" wide starting strip (use width roofing manufacturer recommends) can be cut to length needed. This is embedded in asphalt cement with mineral face down. The starter strip is nailed every 12" with big head 1" roofing nails, and rolled to bind it securely in position.

The width of the starter strip is determined by slope of roof. If roof pitches 4" or more per foot, the starter strip should extend up roof to a point approximately 12" from interior wall. Where the slope is less than 4" per foot, follow directions as outlined for built-up roofing on page 62.



The first 36" wide strip of roofing should be embedded in asphalt cement, rolled, and nailed in place.

Asphalt cement is applied to the upper half. The next course is rolled into position. Always lap each course amount roofing manufacturer recommends.

Wreckers' Close-out Sales

If you are interested in high quality lumber and other materials, and age is not a deterrent, and perhaps is even an attraction, then look for wrecked buildings.

Don't buy at first visit unless you see something you really want. These materials get cheaper as the job goes on—— and in the end are free. The wrecker's situation is generally this: The wrecker contracts not only to clear a site, but to do it by a certain date. Material salvaged and sold at the site is added income and saves hauling and storage or disposal expense. Another basic expense is the removal of salvageable material from the building itself. You can save if you bargin to tear the item or the material out yourself. This can be tricky, so watch the wrecker a while.

As the contract date nears, the wrecker will cut prices to enlist your help in clearing the site. The price reaches zero as the date arrives. The wrecker gives the material away to clear the site and avoid paying a penalty or sacrificing a deposit. At this point, you won't get the pick of the lot, but you will get dimension lumber, flooring, sills, bricks and some glass and fixtures that haven't sold.

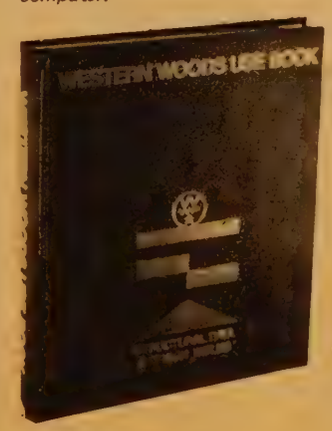
The "Wait til they're desperate" approach works well with the small wrecker. The big ones do little salvaging and are primarily trash haulers. Again though, if you come around late in the day and ask for something they really have no use for, you're helping them move their trash, and it's yours free.

H.C. Clark
Houston, Texas

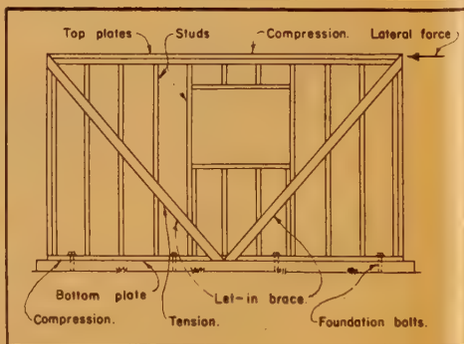
Western Woods Use Book

Loads, spans, how to engineer wood buildings. For someone drawing plans, not for the one-time house builder. Comes with a handy slide-rule type span computer.

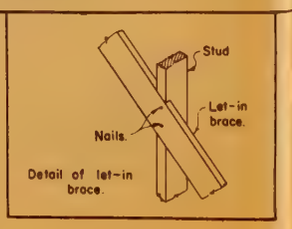
—LK

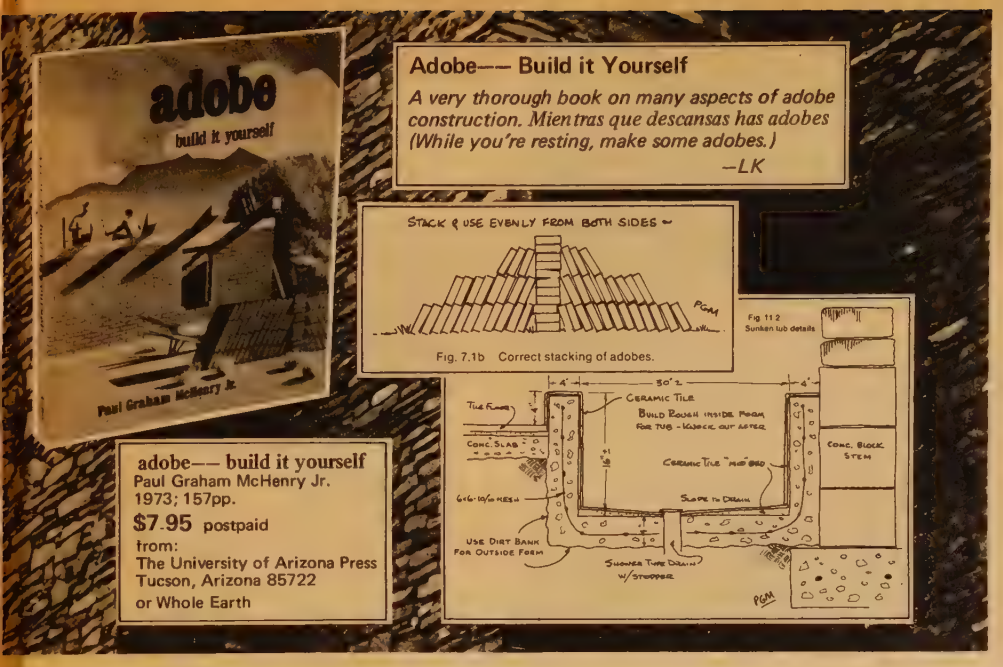


Western Woods Use Book
(Western Woods Products Association)
1973; 316pp.
$10.00 postpaid
from:
Western Wood Products Association
1500 Yeon Building
Portland, Oregon 97204



Wall with Let-in Bracing.





Adobe— Build it Yourself

A very thorough book on many aspects of adobe construction. Mientras que descansas has adobes (While you're resting, make some adobes.)

—LK

adobe— build it yourself
Paul Graham McHenry Jr.
1973; 157pp.
$7.95 postpaid
from:
The University of Arizona Press
Tucson, Arizona 85722
or Whole Earth

Cream Rises

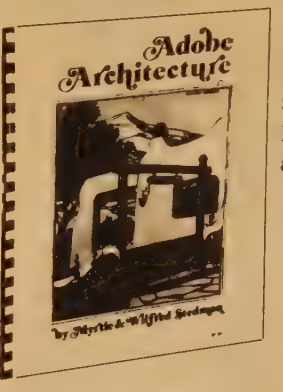
ADOBE - PLASTER

Earth for Homes: Handbook for Building Homes of Earth *All the grit* 102
CINVA-Ram Block Press *Pressed earth blocks* 102
Architecture for the Poor *Moslem Adobe village* 508
Plastering Skill and Practice *Complete* 515

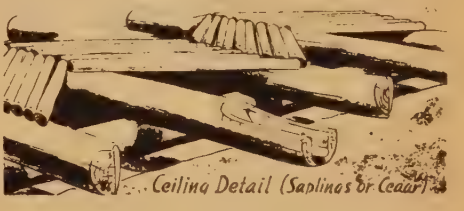
Adobe Architecture

Adobe house design. Different styles, floorplans, detailing, furniture and techniques.

—LK



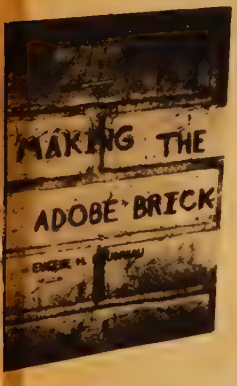
Adobe Architecture
Myrtle & Wilfred Stedman
1973; 42pp.
$3.95 postpaid
from:
The Sunstone Review & Press, Inc.
P.O. Box 2321
Santa Fe, N.M. 87501
or Whole Earth



Making the Adobe Brick

Eugene Boudreau shows a good structural system that passes the Uniform Building Code and makes sense in earthquake country: ½" steel rebars connect concrete foundation to bond beam for structural strength inside the adobe walls. He and his wife made 120 tons of adobe bricks, did their own engineering, built the house, and wrote this book when they finished. Not a thorough analysis of adobe construction but a good account of building one type house.

—LK



Personal experience with daily rates of adobe production showed that I could make a maximum of about 70 of the 4x7½x16 inch adobes, or 35 of the 4x12x18 inch adobes in 8 or 9 hours of continuous hard work. Often I could not achieve this level of production because there were bricks to be stacked, dirt to be excavated, etc. My maximum level of production added up to about one ton of adobes per man per day, and this weight had to be handled several times in the process of turning undisturbed soil into a stack of cured bricks.

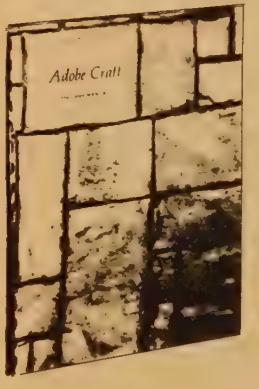
Working the mud into the corners of the mold.

Making The Adobe Brick
Eugene H. Boudreau
1971; 88pp.
$2.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157 or Whole Earth

Adobe Craft

Technical manual on small-scale adobe construction, including landscaping and adobe sculpture. Plans for home-built electric soil sifter and adobe mixer powered by heavy duty drill motor.

—LK

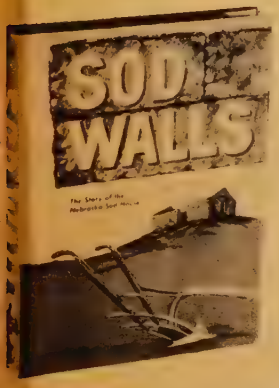


Adobe Craft
Karl V. Schultz
1972; 72pp.
$5.50 postpaid
from:
Adobe-Craft
18322 Carlwyn Drive
Castro Valley, Ca. 94546
or Whole Earth

Sod Walls

Settlers crossing the Missouri River into the Nebraska plains in the 1800's could find no stone or timber for house building. But they soon discovered they could cut dirt blocks from the soil where buffalo grass grew. From this material they built their homes. Detailed accounts of where and how the sod was cut, how the houses were built, what life was like then. Great vintage photos, usually with a work-worn mom and pop and their kids, dogs, horses, tables and wagons posing stiffly in front of the old homestead.

—LK



Sod Walls
(The Story of the Nebraska Sod House)
Roger L. Welsch
1968; 208pp.
$9.00 postpaid
from:
Chief Office Supply Store
Box 190
Broken Bow, Nebraska 68821

Plastering Skill and Practice

Plaster is a good, cheap, durable, fire-resistant time-tested way of covering a building's walls. Yet most one-time owner builders know little about it. It's probably got a bad rep from all the plaster crackerboxes being built of late. As wood gets scarcer, plaster becomes more relevant. For one thing, it can be used well for inside walls, applied with rough texture and trimmed with or surrounded by nice-grained wood. To try it on a small scale, get a few sacks of readi-mix plaster (just add water) and a rectangular steel trowel and try plastering a wall. (I did it over sheetrock, punching holes in it first and it came out nicely.) If you want to go further, get this very complete book on the art.

—LK

Plastering Skill and Practice
F. Van Den Branden & Thomas L. Hartsell
1971; 543pp.
$9.95 postpaid
from:
American Technical Society
848 East 58th Street
Chicago, Illinois 60637
or Whole Earth

Adobe Fireplaces

Plans for the traditional corner adobe fireplace.

—LK

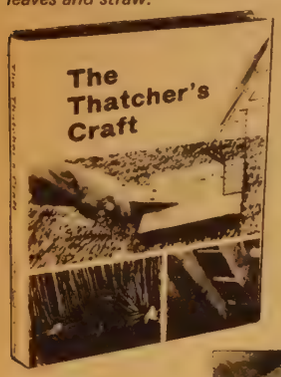
Adobe Fireplaces
Myrtle Stedman
1974; 10pp.
$1.25 postpaid
from:
The Sunstone Review & Press Inc.
P.O. Box 2321
Santa Fe, N.M. 87501
or Whole Earth

The Thatcher's Craft

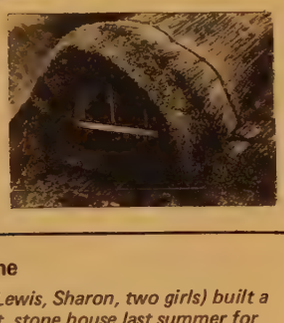
There are several hundred thatchers still at work in England. This is a highly detailed book, with over 500 photos, on their sophisticated craft. It covers three types of thatch: Norfolk reed, which last 50-60 years; combed wheat reed, 25-40 years, and long straw thatch, 10-20 years. How to gather, prepare and apply. With growing scarcity and expense of processed materials, thatching could become an increasingly useful craft.

For funkier thatching, an excellent source is Bushcraft (Pg. 275) which explains seven different techniques, using materials such as reeds and grasses, (best used dry), long stalk ferns (bracken), palm leaves and straw.

–LK



The Thatcher's Craft
Rural Industries Bureau
1960; 225pp.
$9.60 postpaid
from:
Council for Small Industries in Rural Areas
PO Box 717
35 Camp Road
Wimbledon Common
London SW19 4UP
England
or Whole Earth



The older varieties of wheat all produced good long straw, which not only provided ample bedding material for cattle, but also material for the form of thatch known as long straw thatch. These older varieties suffered however from various defects. The plants themselves were vulnerable to wind and rain, were easily beaten down, and were subsequently difficult to harvest. Scientific plant selection and breeding has now produced varieties which, whilst having a heavier yield of grain, are borne on stalks which are much shorter and less pliable. Fortunately there are still varieties which are available to the farmer, and which serve the dual purpose of providing both a good yield of grain, and straw suitable for thatching.

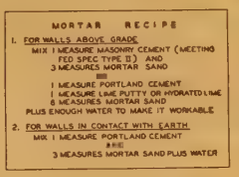
The Art of Bricklaying

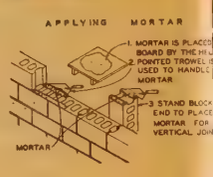
Very complete book on brick and concrete block walls, chimney construction, masonry tools, ornamental brickwork and masonry veneer. The step-by-step how-to instructions for both brick and concrete block are excellent. The book to get if yo plan to lay a lot of bricks or want to learn masonry as an art.

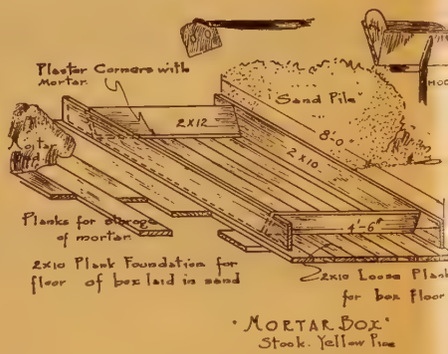
–LK

The Art of Bricklaying
J. Edgar Ray
1971; 254pp.
$10.00 postpaid
from:
Chas. A. Bennett Co., Inc.
809 W. Detweiller Dr.
Peoria, IL 61614
or Whole Earth

Set corner brick carefully. Sight both faces of the brick with the wall below–– then sight down both faces at the same time.







Our House of Stone

*The Watson family (Lewis, Sharon, two girls) built a handsome 1100 sq. ft. stone house last summer for $2,000, moved in and wrote this fine booklet on their experiences. It's the Flagg technique, as used by Helen and Scott Nearing (***Living the Good Life,** *Pg. 47), using wooden forms to hold the stone and concrete until it sets. Amateurs can build straight walls this way. Rassle with rocks, not mortgage payments.*

–LK

Our House of Stone
Lewis & Sharon Watson
1974; 21pp.
$2.00 postpaid
(Includes supplement)
from:
Stonehouse Publications
Sweet, ID 83670

The slab floor was prepared and completed in about four days, the roof in about ten days, the wiring in a week, and the doors, windows, and miscellaneous basic finishing in about two weeks. With many other assorted jobs (trips to town, reading "how-to" books, asking questions, etc.), we were actively building the house for about five months, May-September, 1973.

•

Decide how thick you want your walls. (We used 10" for 8' walls and wouldn't recommend smaller diameters for this kind of construction.) Make sure all stones you gather have at least one axis that size or smaller. A rock with even 1/4" extra must either be chipped off or discarded, for it simply will not fit between the rigid forms you'll be using.

•

The central idea is the use of long, shallow, portable wooden forms, pairs of which are set up facing each other to contain a concrete and fieldstone conglomerate until it sets, at which time the forms are removed, placed one level higher, again filled with concrete and stone, and so on. . . . The use of forms assures even inexperienced builders of straight, smooth, plumb walls. A number of visitors during our construction period expressed amazement that such near-perfect walls could be produced by absolute amateurs, but beyond the basic idea one needs only a little common sense and patience to set the forms perfectly before filling.

The Forgotten Art of Building a Stone Wall

How to build mortarless flat-stone walls. Instructions on splitting mica schist and granite, on building new walls and repairing old ones. Of use where this type of stone is available (as in New England).

–LK

The Forgotten Art of Building a Stone Wall
Curtis P. Fields
1971; 61pp.
$2.50 postpaid
from:
Yankee, Inc.
Dublin, NH 03444
or Whole Earth

Before long I learned by trial and error how to split smaller pieces of mica schist–– say, 6" x 12" x 24"–– without drilling holes. This was done by using two heavy hand hammers one of which was flattened on both faces and was used to pound. The other, which received the blows, was squared on one of its faces and beveled to a splitting edge on the other.

This beveled edge was moved back and forth along the grain of the stone which stood upright on its narrow 6" side and at right angles to the body. It was pounded in three positions: middle, near end, and far end–– over and over until a crevice began to show. Then a few blows on the middle of the longest side finished the job.

Longer slabs may be more easily lifted in place by the use of two planks.

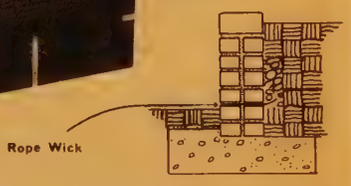
Pounding the bevel-edged hammer with the sledge concentrates the blow to points along the line of the intended split scratched on the stone.

Bricklaying Simplified

A simplified, clear approach to bricklaying. A lot on garden brickwork: walls, patios, barbecues. Easier to understand than **The Art of Bricklaying,** *not as many details. I'd start with this book, graduate to the other if need be.*

–LK

Bricklaying Simplified
Donald R. Brann
1973; 146pp.
$2.50 postpaid
from:
Directions Simplified, Inc.
Div. of Easi-Bild
Pattern Co., Inc.
Briarcliff Manor, NY 1051
or Whole Earth



Another way to make a weep hole is with a piece of clot line. Embed it across wall with end flush with front and will act like a wick.

Pole Building Construction

An old Japanese building technique born out of the need for a structure to withstand earthquakes, pole framing contains many diverse advantages over standard construction. Instead of separate roof, wall and foundation elements, pole construction integrates those elements with the structural simplicity of a tree. Here are some of the advantages:

1. Simple foundation excavation—— drilling holes is much simpler and less expensive than trenching and forming standard foundations.
2. Uses less cement, often back-filled with earth—— a big saving.
3. Eliminates step foundations on a steep site and most under-floor cross bracing.
4. Will support floor and roof, eliminating load bearing walls. This means no headers, bracing in walls, 16" centers and special joists for interior load bearing walls.
5. Roof can be put up quickly after the poles are set if rain is a problem.
6. Simplifies construction for the owner builder by providing a stable structure with less parts.

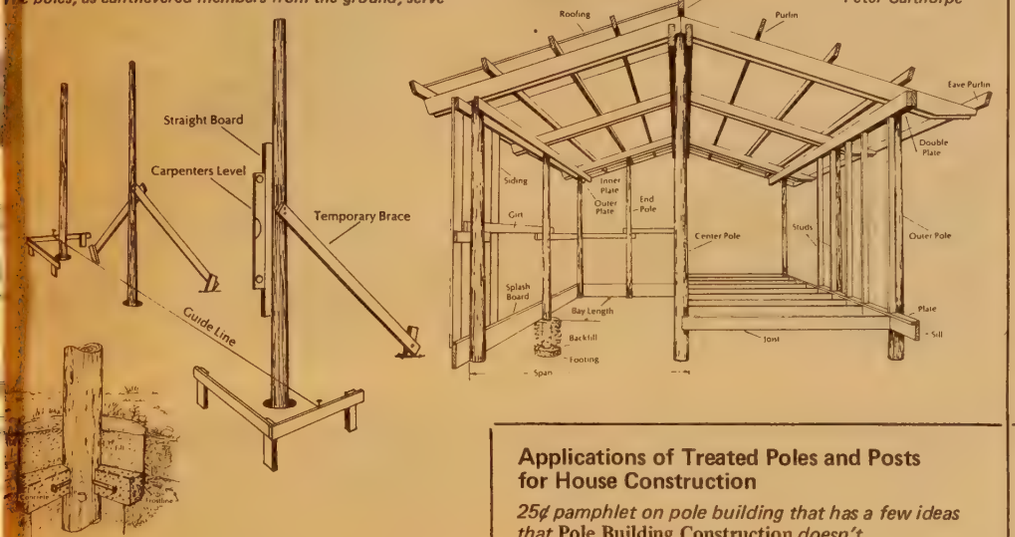
Not only are pole houses good for earthquake conditions, a feature based on their relative flexibility, but since the poles are set much deeper (4' to 8') than standard foundation they are more stable in flood, slide and weak soil conditions.

The main disadvantage is the large timbers needed to span the longer distance between supports. This can be dealt with in some cases by added intermediary post and pier supports for floors.

The poles, as cantilevered members from the ground, serve the multiple purpose of foundation, lateral bracing and framework. The walls, roof and floor are all load free and are merely fastened to the pole frame. Also, the round pole is 18% stronger in bending than a comparably sized and graded skilled timber. Wood is stronger in its natural form because the grain rings are not broken.

There are painfully few sources of information on pole construction. **Pole Building Construction,** *while extensively unimaginative, outlines the basic principles and techniques involved. It adheres to standard construction, not taking full advantage of the forms and details made possible by the poles. This new construction becomes an exciting opportunity for innovation as well as savings for the owner-builder.*

—Peter Calthorpe



One firm which manufactures treated poles says: "In the Thirties a well-treated pole was supposed to last 30 years. Now this estimate has risen to 45 to 50 years, since anticipated failures did not occur. The length of service has been achieved under the most severe conditions. Of course, any pole which you use inside your building will be protected, and an even longer life can be expected."

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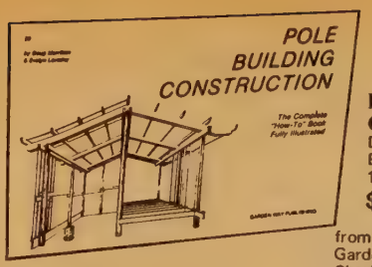


Pole Building Construction
Doug Merrilees & Evelyn Loveday
1973; 48pp.
$3.00 postpaid
from:
Garden Way Pub. Co.
Charlotte, VT 05445
or Whole Earth

Arts and Crafts of Hawaii - Section II - Homes

The art of Hawaiian lashing. Details on gable and hip-roofed buildings lashed together with a three-ply braid of 'uki'uki grass.

—LK

Arts and Crafts of Hawaii - Section II - Houses
Te Rangi Hiroa
(Peter H. Buck)
1964; 39pp.
$1.50 postpaid
from:
Bishop Museum Press
P.O. Box 6037
Honolulu, HI 96818

FIGURE 63.—Junction of roof and wall rods: a, side view of junction between roof rod (5) and wall rod (6) with extra purlin (7); b, continuation of clove-hitch lashing down over extra purlin (7); c, close-up of junction join with wall rod (6) on right; d, junction join with wall rod (6) on left.

Applications of Treated Poles and Posts for House Construction

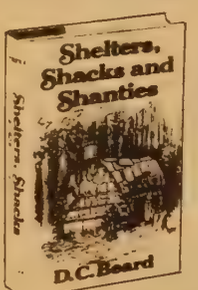
25¢ pamphlet on pole building that has a few ideas that **Pole Building Construction** *doesn't.*

Applications of Treated Poles and Posts for House Construction
Donald H. Percival
1972; 8 pp.
$ .25 postpaid
from:
Small Homes Council—Building Research Council
1 E. St. Mary's Rd.
Champaign, IL 61820

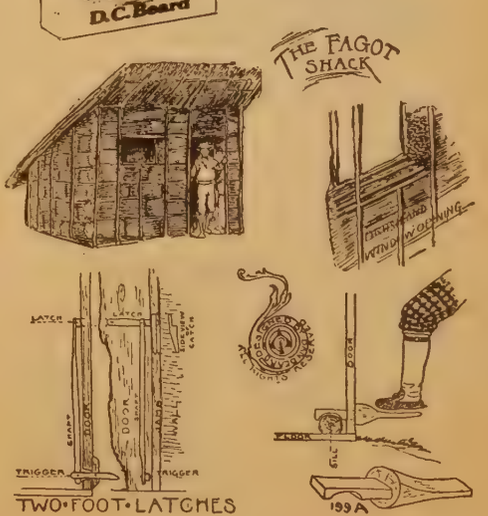
Shelters, Shacks and Shanties

An unusual, unique little book on primitive structures, sheds, treehouses, Indian buildings, cabin hardware and wilderness shelter. The building diagrams are complete and detailed. Written for Boy Scouts by an American sportsman-outdoorsman in 1914. How simple things were then.

—LK



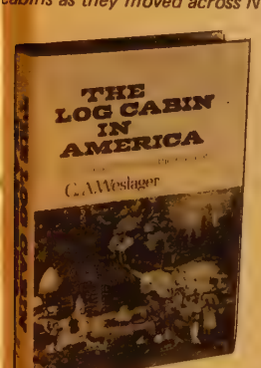
Shelters, Shacks and Shanties
D. C. Beard
1972; 243pp.
$4.95 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth



The Log Cabin in America

The how-to books on log cabin building tend to show relatively few designs. This one contains over 90 photos, some rare, of a great variety—— good to look at for design ideas. It's also a thorough factual account of the grassroots origins and nomadic-homesteader nature of the families who built the log cabins as they moved across North America.

—LK



The Log Cabin in America
(From Pioneer Days to the Present)
C. A. Weslager
1969; 382pp.
$12.50 postpaid
from:
Rutgers University Press
30 College Ave.
New Brunswick, NJ 08901
or Whole Earth

The chimney is generally placed at the end of the building, and is made as follows: First, four or five logs are cut out the same as for a door-place, of what width people chuse, and then some logs are cleft and placed in the following form on the outside,

so that the ends of them are let in between the ends of the end-logs of the cabin that were sawed. The clef-logs are thus continued, till they rise as high as the logs that were sawed out. The chimney is then carried up thus,

exactly in the form of the cabin, but of much smaller logs, till it rises above the roof of the building; it is drawn in and made smaller from the bottom to the top. It is then chunked, that is, cleft pieces of wood are driven in between the logs, to fill up the open places.

Juneau, Alaska, cabin, erected by Americans in 1882 as a dwelling; became first public school in 1885; in 1890 when picture was taken, it was being used as a church, with new bell tower under construction; torn down in 1914.

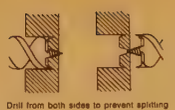
SHELTER

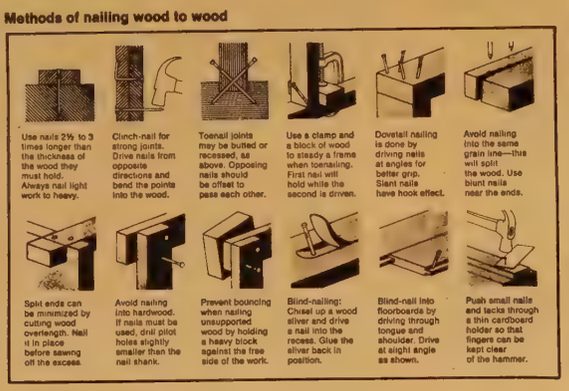
Reader's Digest Complete Do-It Yourself Manual

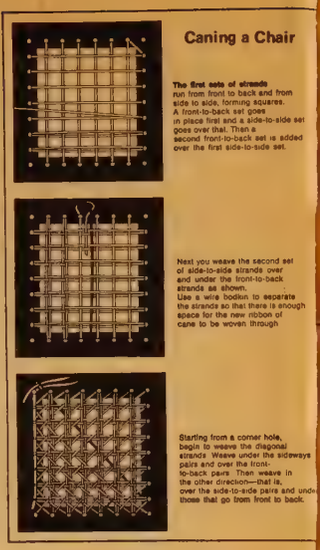
Jack up that sagging house, recane that worn-through chair, replace that rotten window sill. It's all here, in the most complete home repair book I've seen. 600 pages of clear instructions on building, mending, maintaining, carpentry, plumbing, wiring, tools, furniture, climate control, metalwork, brick laying, concrete, heating, and so forth. Good index. Reader's Digest has got it together.

—LK [Suggested by Al Perrin]

Reader's Digest Complete Do-it-yourself Manual
1973; 600pp.
$15.95 postpaid
from:
Reader's Digest
Pleasantville, NY 10570


Drill from both sides to prevent splitting





Riteway Wood and Coal Heaters

Ashley is a good little hard-heatin cheap working wood stove, like Ken Kesey says. But the Riteway is an automatic that costs a little more and works a little better. It is made of sheet metal but heavy gauge—– better for the hard use it gets in the sub-zero here. (Though cast iron would be better yet.) Riteway used to make furnaces, and people in these hills still heat houses with them. They're homely, like the Ashley—– also economical on fuel. But Riteway's automatic thermostat works better.

—David Lyle

Riteway Wood & Coal Heaters
$261 FOB
Harrisonburg, VA.
from:
Marco Industries, Inc.
P.O. Box 6
Harrisonburg, VA 22801
or Whole Earth Truck Store

Other Stove Sources

Other manufacturers of stoves with gas-tight air chambers:

Ashley Automatic (See Pg. 99)

Autocrat Corporation
New Athens, IL 62264
"Autocrat Thermo-Wood Automatic Wood Heater"

King Stove & Range Co.
P.O. Box 730
Sheffield, AL 35660
"King Automatic Wood Circulators"

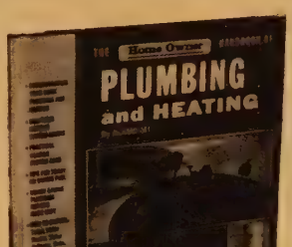
The Woodburners Handbook

How to cut, split and stack firewood, cook on a cast iron stove, build simple wood-burning stoves, design and repair fireplaces and chimneys, and keep your toes warm on a mean night.

—LK

The Woodburners Handbook
(Rekindling an old Romance)
David Havens
1973; 107pp.
$2.50 +50¢ postage & handling
from:
Media House
Box 1770
Portland, ME 04104
or Whole Earth

This is the ultimate in home cook stoves. It has warming ovens, drying racks, water tanks, water coils around the fire box, front and side feeding doors for the firebox, a multitude of draft controls and a foot pedal for opening the oven door.

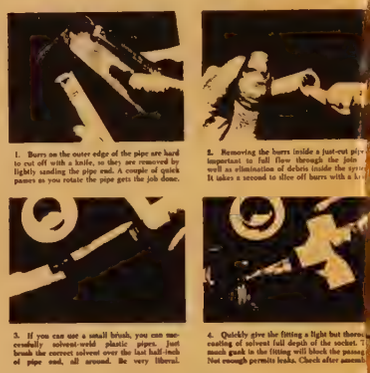


The Home Owner Handbook of Plumbing & Heating

The best book on home plumbing, and a bargain.

—LK

The Home Owner Handbook of Plumbing and Heating
Richard Day
1974; 125pp.
$2.98 postpaid
from:
Bounty Books
419 Park Ave. South
New York, NY 10016
or Whole Earth



WOOD STOVES AND ACCESSORIES

David Lyle, of So. Acworth, NH, a man who knows a lot about wood stoves, recommends the Jøtul cast iron wood stove as the best he's seen. Priced from $185 to $450, they hold a fire as long and are as efficient as the Ashley or Rite-way, but are better-built and handsome (coated with enamel). He also reports that the Portland Foundry Stove Products (Pg. 98) are ". . . good heaters, handsome, well-made, reasonably durable, but not particularly economical on fuel. . ."

Information on Jøtul Stoves from:

Aksjeselkapet, Jøtul, Postbox 6206, E.T., Oslo 6, Norway, Stein Hagen, Division Manager. U.S. Importer: Eva Horton, Kristia Associates, Box 1461, Portland, Maine 04101. Two U.S. dealers: David Lyle, So. Acworth, N.H. 03607; L. L. Bean, Freeport, Maine 04032.

Another good stove works: Washington Stove Works, Box 687, Everett, Wash. 98006.

Here are two wood heat accessories that are said to greatly increase heat output: The Thermograte and the Heat Saver. Jay Baldwin says you can make something like the Thermograte out of exhaust pipe (hi-carbon, corrosion resistant steel), having them bent at a shop, welding.

Heat Saver
$78.00 + postage
(23 lbs.)
from:
The Hubbard Creek Trading Co.
Box 9
Umpqua, OR 97486

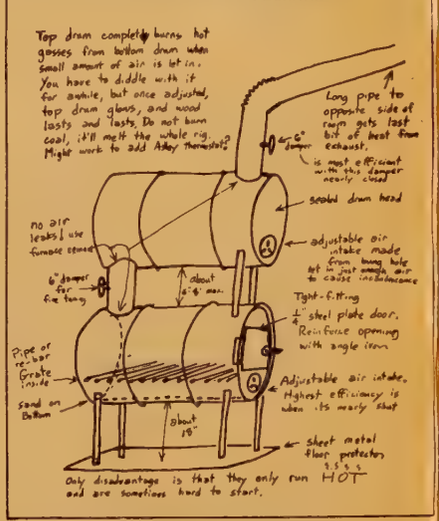
Thermograte
$69.50 - 99.50
shipping prepaid, for two sizes
from:
Thermograte Enterprises
51 Iona Lane
St. Paul, MN 55117

A good ready-made ventilating fireplace is the Heatilator, Vega Industries, Inc., Mt. Pleasant, IA 52641.

If you're handy with tools, there's the Alaskan Drum Stove:

RE woodburning stoves: Whilst living in Alaska for 2½ years, I noted that the most economical and efficient wood heater was made from two 50 gallon drums (the heaviest type) in the following way. I'm told that kits are available for converting drums thus, but I don't know where to get one. Properly adjusted, they do not creosote the flue, as everything gets burned. They'll burn the fuzz off a Mackinaw at 8 feet, and some I saw had a fence around them to prevent accidents!

—J. Baldwin



Finally, Andrew's energy-saver: the down vest. He says that, worn over a wool shirt it can keep you comfortable between 40-50° and to look for these features: rip-stop nylon filled with 4 oz. goose or duck down, snaps rather than zipper, well-insulated slash pockets, a high collar and a back flap. The best Whole Earth has seen costs $24.00 from The North Face, P.O. Box 2399 Station A, Berkeley, CA 94702.

—LK

Ventilators

Motorless air conditioning. —LK

Lomanco Turbine Ventilators
Brochure and information on local dealers from:
Louver Mfg. Co.
P.O. Box 519
Jacksonville, AR 72076

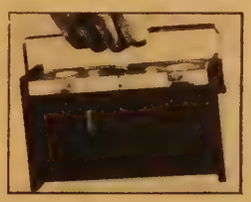
Wind-Wonder fiberglass turbine ventilators
Information from:
Wind-Wonder, Inc.
P.O. Box 36462
Houston, TX 77036

Air Ionizers

Enclosed is some information about air ionization and negative air ionizers. This is quite an important area, one often ignored, and there is a rather impressive scientific literature developing in support of the biological importance of air ions. Most recently Dr. A.P. Krueger (UC Berkeley, see enclosed article from New Scientist) found increased resistance to influenza in laboratory animals "treated" with negative ions, compared with animals in ion-depleted environments. This is highly significant as most urban, air-polluted environments would be considered ion-depleted. Pollutants strip the air of ions. Most of the studies on air pollution are concerned with what is added to the air (toxic substances), not what is removed from the air (biologically active air ions). Negative ionizers offer a practical, technological way of producing an excess of negative ions (which seems to have very beneficial physiological and psychological effects).

—David S. Sobel

Airtone Personal Portable Air Ionizer
$137.60 + $11.25 airfreight
from:
Medion Ltd.
34 Baker St.
London, W1M 1DA, England

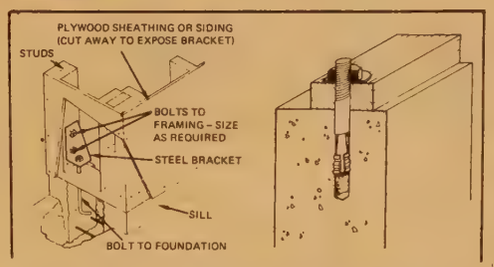


Peace of Mind in Earthquake Country

Fascinating. There's no better book on earthquakes and no other book at all that tells you what to do about them: where to locate, evaluating sites & buildings, insurance, design, and where to run.

—SB

Peace of Mind in Earthquake Country
(How to Save Your Home and Life)
Peter Yanev
1974; 304pp.
$4.95 postpaid
from:
Chronicle Books
870 Market St.
San Francisco, CA 94102
or Whole Earth



Existing wood-frame buildings lacking sufficient (or any) sill connections can be rather easily repaired with the addition of 1/2-inch or larger steel expansion bolts wherever you have access to the sill. The ends of the sills are especially important and should be anchored even if you have to temporarily remove the wall covering or bracing in order to add the bolts. The hole that is drilled into the sill and foundation does not have to be precise in its length—— that is, it can be longer than the bolt—— but the diameter of the hole should provide a snug fit for the bolt. After drilling the hole, caulk the inside edge thoroughly, then insert the bolt, add a washer and the nut, and turn the latter until it is as tight as possible against the washer.

Lightning Protection

Very thorough book on lightning, the damage it does, precautions that can be taken. Expensive book, so ask for it at your library.

—LK

Lightning Protection
J. L. Marshall
1973; 190pp
$14.95 postpaid
from:
John Wiley & Sons, Inc. Pub.
605 Third Ave.
New York, NY 10016
or Whole Earth

Protection of tent in isolated area with overhead wire and four ground rods (one ground rod is at the rear).

SHELTER

4

LINDA LOVELACE SERVES AS A CATALYST

A doorbell chimes the first six notes ("They asked me how I knew...") of *Smoke Gets In Your Eyes.*

Chocolate Graham hums the next five notes ("...my true love was true"). She is twenty-three years old. She stands exactly four feet tall. Her skin is brown. Her head—close natural hairdo— bounces like licorice cotton candy as she skips like a child to answer the door.

A periscope arrangement enables her to look through the peephole. A special doorknob installed two feet off the ground enables her to open the door.

A deliveryperson hands her a box.

"Oh, good. My new calling cards. I'd just about run out of them."

One of the cards is glued to the outside of the box. A rainbow reaches from one lower corner of the card to the other. Another rainbow, upside-down and interlocking with the first rainbow, reaches from one upper corner to the other. Fancy embossed lettering reads:

Can You Pass
the CRAP Test?

Below, in tiny type, there's a telephone number.

The deliveryperson asks, "What's this crap test anyhow?"

"It's sort of a private joke."

"Well, I mean, whattaya do with the cards? Are you in some kinda business?"

"No, it's more like a hobby. I just give them to certain people when they're not looking."

"You could slip 'em in their pocket, and they wouldn't even know the difference."

bellows—— "Call for! Philip Morris! I dunno if he was a dwarf or a midget, I can never tell the difference, not that I hafta tell the difference that often. Which are you, by the way? I mean I hope you don't mind my asking."

"Oh, that's okay. I'm not a dwarf or a midget. I'm a pygmy...."

Flashiebackie:

Young Chocolate Graystroke's hair is twisted into many mini-pigtails, each tied with a bright red ribbon. She is sitting in the parlor of her parents' mansion. They are an elderly Caucasian couple.

Mother: "Chocolate, we've decided that the time has come to tell you that you were not actually born to us."

Father: "The truth of the matter is, we kidnapped you."

Mother: "You must understand, your father was an orphan himself."

Father: "Yes, my parents were killed in a plane crash in an African jungle. However, the body of my younger brother— you've seen baby pictures of Uncle Tarzan in the family album— was not found among the wreckage."

Mother: "So we eventually went on a personal pilgrimage and, to make a long story short, we took you."

Father: "I considered it a case of retroactive cultural exchange."

Mother: "But, Chocolate, we want you to know that we love you just as much as if you had been legally adopted...."

It's Saturday evening at the old abandoned newsstand.

"Do you desire," Tongue Fu asks Captain Mediafreak, "to go see a movie?"

"Nah, you better go alone. This is family night for me. I'll give you some cash, though. They don't have intermissions at films."

"Where is your family?"

"Right here." With his one and only hand, Captain Mediafreak gestures toward his TV set. "The Bunkers at eight o'clock— Archie and Edith and Michael and Gloria and their neighbors— and then at eight-thirty there's *Mash*, with Hawkeye, Trapper, Hot lips, Radar and all their gang."

"These names do not mean anything to me."

"Yeah, well, I'm closer to them than to my own flesh-and-blood family, I'll tell you that. And at nine o'clock, there's Mary Tyler Moore, and Rhoda and Lou Grant and Ted Baxter. I'd really miss them if I went a whole Saturday night without seeing any of 'em."

"But is it not odd that your pleasure should come from watching other people live their lives for you?"

"Listen, it's not even other people. It's actors pretending to be other people. But, like, at nine-thirty there's Bob Newhart and those other characters on his show— they're more fun than most of the real people I know. And then at ten, it's Carol Burnett, with Harvey Korman and Vicki Lawrence and Lyle Waggoner and Tim Conway— I consider them family— they're delightful compared to my actual relatives. And I don't even have to do anything. But I'd rather spend an hour watching them do skits and songs than sit around with my relatives discussing Carol Burnett's skits and songs, right?"

And so Tongue Fu goes to see *Deep Throat* by himself.

On the screen, a gigantic close-up of Linda Lovelace is sucking away at an unidentified throbbing penis. For Tongue Fu, the fantasy of probing the recesses of her throat and sensuously rubbing her displaced clitoris to climax with his own unique tongue, results in such a holy hard-on that he becomes convinced he has finally met his soulmate.

To inquire about her, he approaches the office of the theater manager, Buff Mogul, just as the police swoop in to arrest him for displaying an obscene film. Tongue Fu gets arrested along with him, as a material witness, because his erection won't detumesce. It remains aloft all the way to the precinct house.

An officer tells them, "You're each allowed to make one phone call."

Buff Mogul scratches one of his fresh sideburns while he talks to his attorney. Then he tells Tongue Fu, "Don't worry, my lawyer'll get us both out of here tonight."

"But I am allowed to make one phone call also."

Buff Mogul takes a card from the pocket of his mod jacket and passes it to Tongue Fu.

"Here," he says. "I have no idea where this came from. Why don't you try phoning and see what happens."

Tongue Fu looks at Chocolate Graham's calling card. Then he dials her number with the tip of his tongue.

[Continued, page 523]

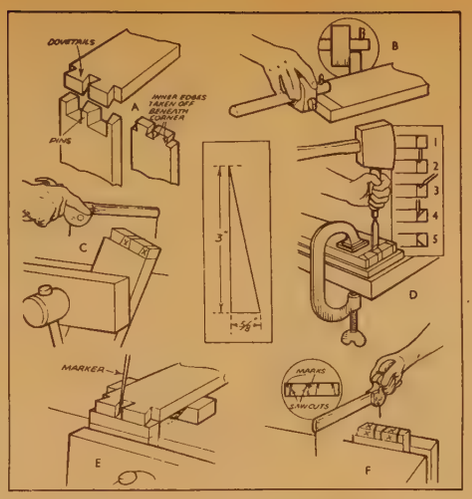
SHELTER

The Complete Book of Woodwork

Charles Hayward is a master cabinetmaker—— old fashioned variety—— who can also draw and write. Result: a series of clear, perhaps best ever, books on carpentry and hand tools with no "trade secrets" held back. This is a general book, an introduction to woodworking and hand tools, and the best single book I've seen for a beginning woodworker or carpenter. Once you learn the basics as presented here, you'll be ready to get into the various specialized branches of the craft: cabinet making, furniture, house building, etc.

—LK
[Suggested by Hugh Shannon Myers]

The Complete Book of Woodwork
Charles H. Hayward
1972; 344pp.
$8.95 postpaid
from:
Drake Publishers, Inc.
381 Park Avenue South
New York, NY 10016
or Whole Earth



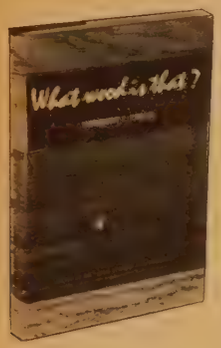
Stages in Marking and Cutting Dovetail Joint

A. Completed through-dovetail. B. Marking with cutting guage. C. Sawing dovetails. Note angle of wood to give upright cut. D. Chopping dovetails. Inset stages are shown. E. Marking pins from dovetails. F. Sawing pins. Saw is held on waste side of mark.

What Wood is That

40 actual wafer-thin samples of wood are contained in the fold-out frontispiece to this book, from afromosia to zebrawood. The samples and a unique classification system using 14 characteristics (rings, pores, weight, smell, leaf shape, etc.) are used to identify the woods most widely used in the U.S.

—LK
[Suggested by Ann Rockler]



What Wood is That
(A Manual of Wood Identification)
Herbert L. Edlin
1969; 160pp.
$7.95 postpaid
from:
The Viking Press
625 Madison Ave.
New York, NY 10022
or Whole Earth

Associated with the rings in precisely the same circular pattern come the pores, or vessels. On the cross-cut surface they show as small circular holes usually visible to the naked eye, and always apparent—— if present—— under a hand lens. On longitudinal surfaces they form shallow grooves or striations that run, like the rings, for virtually the whole length of the piece of wood examined.

There are three possibilities here, which divide all timbers into three convenient groups:

(a) Pores absent. *Softwoods, yielded by coniferous trees, which never develop pores.*

(b) Pores in rings. *Certain hardwoods form large pores, in distinct circles, at the inner edge of each annual ring.*

(c) Pores diffuse. *Other hardwoods have small pores scattered evenly right through each ring.*

Old Ways of Working Wood

Chopping, splitting, sawing, boring, chiseling, shaping, planing and turning wood, the old way. Purely hand woodwork: taking down the trees in the woods (including extensive axe info), squaring them into timbers, splitting them into shingles, shakes or posts, and performing a variety of operations without a lumber mill, skillsaw, powerdrill, or Stanley Sureform.

—LK

Old Ways of Working Wood
Alex W. Bealer
1972; 231pp.
$12.50 postpaid
from:
Barre Publishing Co.
South Street
Barre, MA 01005
or Whole Earth

The earliest form of lathe, still being used in many parts of the world including the United States is no more than two logs, or heavy beams stuck in the ground with a pointed pin in one and a pointed screw at the same level in the other. Stuff being turned is fixed in its longitudinal center between these points and held there by the tightening of the screw.

Before the use of screws, one of the points was probably held in place by a small wedge after being driven into the center of the stuff.

Power to turn the stuff comes from a long primitive treadle and springy pole, or lath, attached to the ceiling joists above the lathe or, for outdoor installations, from a springy, growing limb of a tree, with a strap stretched between the two. The strap wraps once around the stuff and is held taut by the spring of the lath. When the treadle is depressed the strap rotates the stuff rapidly; when the treadle is released the spring of the lath rotates the stuff in the opposite direction, returning it to its original position, a matter of simplicity itself. Shaping is done by holding a turning chisel against the stuff on the downward stroke of the treadle, removing it on the reciprocal motion, and repeating the process until the stuff is formed. During turning, the chisel rests on a small board fastened between the two parts, its top edge slightly above the center axis of the stuff.

•

Sometimes a tree to be cut will lean so heavily in the wrong direction for felling that no compensation of the leaning weight can be made with even the deepest felling cut. In such a situation the axman may resort to the use of a spring pole.

A spring pole is no more than a straight, springy sapling, three to four inches in diameter at the butt and twelve to fifteen feet long, stripped of all branches. To use it the axman, after cutting a shallow first notch in the tree, cuts an additional shallow notch some eight or ten feet from the ground on the leaning side of the tree. If a properly placed limb is found this far from the ground it may serve in place of a notch. The top of the spring pole is then inserted in the notch or under the limb and the pole is pulled from the middle to form an arc, its convex curve toward the tree. While the spring pole is so held a stout stake is driven into the ground against its butt. Then the felling kerf, opposite the pole, is cut deeper than usual. When the trunk is nearly severed the spring of the pole will push the tree over in the desired direction of fall.

Cream Rises
WOODWORKING

Woodcraft Supply *Fine tools, mail order* **146**
A Museum of Early American Tools *Motorless woodcraft* **150**
The Complete Book of Woodwork *Beginner's Best* **520**
The American Shakers and Their Furniture *Elegant* **521**
The Encyclopedia of Furniture Making *Clear compendium* **521**
Frog tools *Good woodworking* **525**

Woodwork Joints

Bet you thought the way to put two pieces together was to put one next to the other grab some nails and pound away. Wrong. . . wrong. . . after reading this book you WILL KNOW what kind of joint to use on the corners of a box you plan on veneering. . . (just so you know, you need a VENEER KEYED MITRE joint, read the book to find out why. . .) Not only what kind of joint to use for every situation, but how to do them by hand. More, maybe than you want to know about joints, but its hard to OD on good information.

—Hugh Shannon Myers

Woodwork Joints
(A Woodworker Handbook)
Charles H. Hayward
1970; 176pp.
$5.50 postpaid
from:
Drake Publishers, Inc.
381 Park Ave. South
New York, NY 10016
or Whole Earth

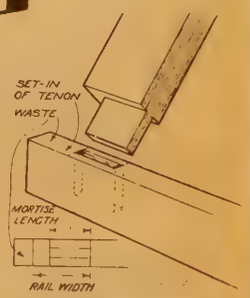


FIG. 7. SIMPLE MORTISE-AND-TENON JOINT.
The waste piece at the end should always be allowed as it helps to prevent splitting when mortising. A haunch is desirable for good work.

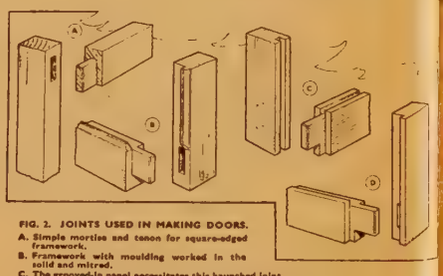


FIG. 2. JOINTS USED IN MAKING DOORS.
A. Simple mortise and tenon for square-edged framework.
B. Framework with moulding worked in the solid and mitred.
C. The grooved-in panel necessitates this haunched joint.
D. Square-edged framework with rebated-in panel.
In good quality work joints at A, B, and D would have a haunch.

Reverence for Wood

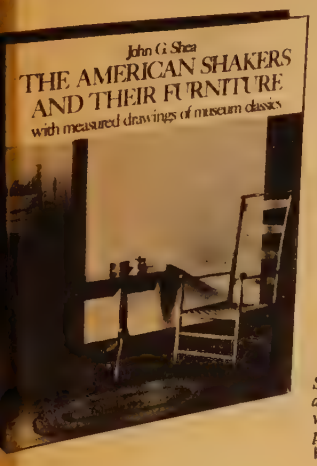
Another fine book on woodwork is **A Reverence for Wood** *by Eric Sloane (Pg.* **150***). Sloane's outstanding sketches show the diverse use of wood by early Americans. Houses, birchbark canoes, house implements, various properties of the different woods, good ideas for making doors. Now in paperback, it's worth getting: $2.00 postpaid from Ballantine Books, Inc., 457 Hahn Rd., Westminster, MD, 2157, or Whole Earth.*

—LK

The American Shakers and their Furniture

Photos and working drawings showing how to build many of the pieces, and a well written, fascinating history of the early American Shaker communities. The Shakers made and grew just about everything themselves, started the first mail-order seed business, built powerful, durable buildings and in one of their wood shops used a water-powered lathe. (They also prophesied the early return of God's kingdom to earth and were celibate). Their furniture was honest, humble and bone-bare. They treated wood like the rare gift it is, adding no superfluous touches. Man's works they said, should be ". . . perfect unto their purpose."

—LK
[Suggested by John Bradbury]



The American Shakers and their Furniture
John G. Shea
1971; 208pp.
$12.95 postpaid
from:
Van Nostrand Reinhold Co.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

Shaker "flight of shelves," built at Hancock around 1830, had shelves of graduating widths for storing preserves and dairy products. Photographed by author at Hancock Shaker Village, Hançock, Mass.

Shaker Furniture Kits

Shaker Workshops, Inc. offers replicas of many of the well-known Shaker pieces of furniture for sale via mail order. Chairs, benches, tables, chests, mirrors and the handsome oval boxes along with assembly instructions.

—LK
[Suggested by David Sowd]

Catalog from:
Shaker Workshops, Inc.
P.O. Box 710
Concord, MA 01742
or:
Shaker Workshops, Inc.
5 Ross Common
Ross, CA 94957

From the beginning, the founders of SHAKER WORKSHOPS resolved not to compromise either the quality or authenticity of the Shaker originals in the products offered for sale, and to select as prototypes for the pieces produced only the finest examples in Shaker museums and recognized private collections.

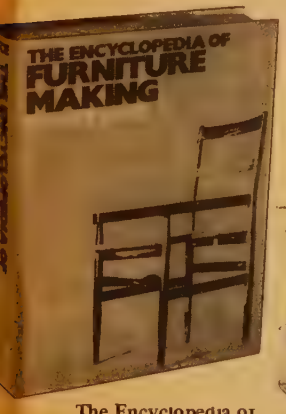
•

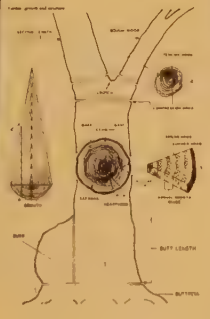
Kit: $40.00 Weight 12 lbs. U.P.S. or Parcel Post

The Encyclopedia of Furniture Making

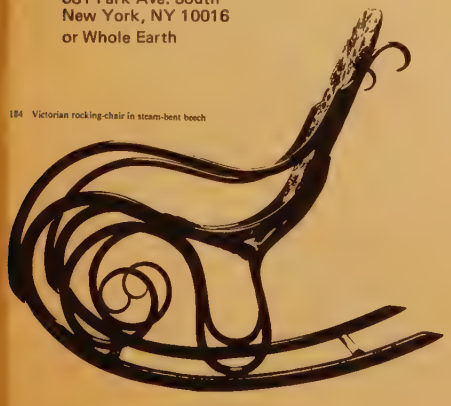
Joyce is British; his approach to wood is that of a "machine-assisted" hand craftsman soaked in the rich tradition of English joinery. He has high standards and a wealth of knowledge to offer the craftsman interested in making top quality furniture. Covers in detail many areas that Feirer's **Cabinetmaking and Millwork** *(Pg. 145) only touches lightly; e.g., Joyce gives 5 pp. to tambors (or roll-tops) while Feirer gives them a scant 2 paragraphs. I don't want to knock Feirer. I'm glad to have the huge amount of info. in his book, but it's an industrial education text and looks and reads like one. Joyce comes from a more leisurely tradition. His book is lavishly illustrated, fun to read and savor.*

—Norman Potter





The Encyclopedia of Furniture Making
Ernest Joyce
1973; 494pp.
$14.95 postpaid
from:
Drake Publishers Inc.
381 Park Ave. South
New York, NY 10016
or Whole Earth



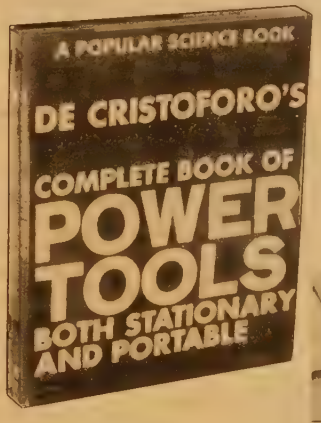
184 Victorian rocking-chair in steam-bent beech

De Cristoforo's Complete Book of Power Tools

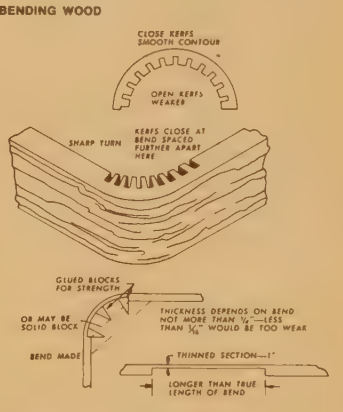
The author has been writing on tools and shop projects for 20 years. This book amasses a comprehensive collection of techniques and instructions for the use of power tools. It is without a doubt the best single volume I have ever encountered for the amateur. It is especially good at showing how to overcome the frustrations of the inexperienced user in obtaining the precision results he knows are obtained by the professional, using the same tools. The author shows how to make numerous jigs and fixtures that make difficult jobs easy. By far the greatest emphasis is on the table saw and the radial saw. Since these are usually the first stationary power tools purchased, the book is eminently practical.

De Cristoforo's style is very readable, and the illustrations and photographs are numerous and of excellent quality. Whenever one reads the De Cristoforo method for accomplishing an action he has attempted previously himself, it is immediately apparent that De Cristoforo "has been there before" and has developed a superior and probably safer method.

—Karl C. Thomas



De Cristoforo's Complete Book of Power Tools
(Both Stationary & Portable)
R.J. De Cristoforo
1972; 434pp.
$9.95 postpaid
from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth



AMT Power Tools

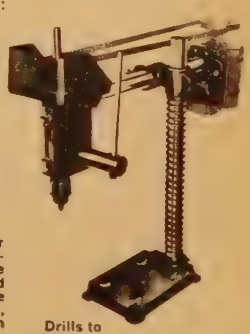
AMT makes and sells direct by mail order a line of low cost simple power tools, primarily for woodworking.

Included in the line are an 8-inch table saw, a jointer planer, belt and disc sander, drill press, wood lathe and wood shaper kit. All the tools are simple "stripped down" versions, but they work effectively. They are generally relatively small, but instructions are furnished for making larger tables, etc. Be sure to read the catalog sheets carefully, as almost all accessories are available only at extra cost (low, however) and also some good features can be specified, such as ball bearings in the table saw for a nominal extra price. AMT also makes and sells an unusual 8-inch radial saw which can do most of the work of other 10-inch radials. You must specifically request the data sheet on the radial saw, as for some reason, it is not advertized with the other power tools, and is not included in the mailing if you don't specify it. Also request their accessory sheet, as it contains some useful extras, and also good prices on saw blades, etc. The accessory sheet includes a motor base adaptor which allows easy use of an old washing machine motor for powering the tools.

AMT has been forthright and honest in mail order dealings. Their factory at Royersford is near Valley Forge, and if you are in the area you can stop in and see the real thing(s) on display.

—Karl C. Thomas

Brochure and specifications from:
American Machine and Tool Co.
Fourth and Spring Streets
Royersford, PA 19468



Radial Drill Press
$48.80

"A REAL HONEY" . . . **Popular Science** ". . . simple, flexible, efficient and economical all at the same time. Drive is actually an age-old principle borrowed right from the big industrial machines . . . smooth, gleaming holes in heavy plastic. In metal . . . even more impressive . . . if duplicated in conventional design, would sell for $100 to $150."

Drills to Center of 32" Circle

Sears Craftsman Tools

Tom Bender wrote that Sears Craftsman tools are not as well-made as they used to be. J. Baldwin reports that he recently fell on his head when a Sears crescent wrench broke, and that materials going into Craftsman tools are still good, but workmanship is slipping. Sears is still a good place for a great variety of hand tools, reasonably priced, and they will replace any tool that breaks, but you should check each tool carefully.

—LK

The Traditional Crafts of Persia

A scholarly, detailed account by a man who studied the crafts of Persia in the early 1940's. Metal and wood working, building, textiles, leather work and agriculture. Much of the information could be useful in a similar climate. There are some impressive oriental type windmills that turn vertically, good information and ideas on plastering. Also historical development of the various techniques and their influence on eastern and western civilizations.

–LK

The Traditional Crafts of Persia
Hans E. Wulff
1966; 405pp.
$7.95 postpaid
from:
MIT Press
28 Carleton Street
Cambridge, MA 02142
or Whole Earth

Sistan Windmills

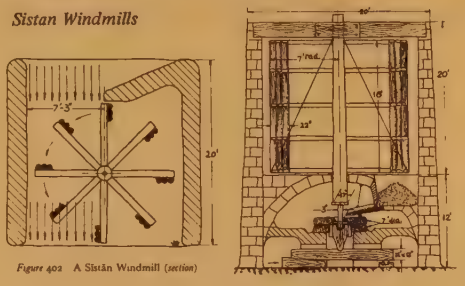


Figure 402 A Sistān Windmill (*section*)

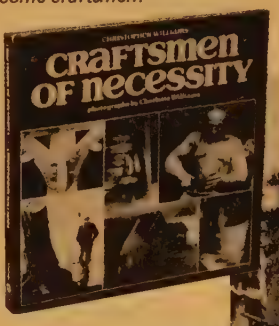
To this day no drawings are prepared for the building *(bina kardan)* of an ordinary house. The common practice is that owner and builder "draw" the plan *(naqseh piyadeh)* on the actual site by marking the walls with powdered lime *(ahak)* or gypsum *(gac)*. Common laborers *(hammal)* dig *(kandan)* the trenches *(saldeh, saludeh)* for the foundation *(pai)*, about 18 inches deep and slightly wider than the planned thickness of the wall. Whatever earth *(hak)* is dug out is carefully gathered at a spot where it is mixed *(mahlut)* with burnt lime *(ahak)* and water into a soft paste *(sefteh, sefteh, boto, batal)*. A layer of about 6 inches of this paste is placed *(rihtan)* in the trench and coarse stone ballast is thrown *(zadan)* into it. These stones *(sang)* have been brought by donkeys from the nearest quarry *(ma dan e sang, kan-e sang)*. They are about 6 to 8 inches in size. With one layer *(cineh)* of stones in the trench a second layer of mud paste is worked over the stones, ballast follows, and this is repeated until the trench is filled. Within three to four weeks these foundations have sufficiently set to begin building the walls. In due course the lime-mud-stone mixture becomes as hard as rock, as the writer had an opportunity to experience when building a technical college at Siraz over the foundations of a caravanserai erected by Karim Han-e Zand in 1760 A.D.

The building of a Pise *Wall*

Craftsmen of Necessity

To gather this material, Christopher and Charlotte Williams travelled 40,000 miles in a VW van through Europe, North Africa, Egypt, Syria, Turkey and Finland. They visited rural areas, established rapport with local residents, then studied and photographed indigenous crafts and remaining craftsmen. Photos are excellent (some reminiscent of Architecture Without Architects *[Pg. 84]), commentary is perceptive without being pompous, and what is shown is inspiring for any craftsman or hand-working home builder. Might Americans ever of necessity become craftsmen?*

–LK



Craftsmen of Necessity
Christopher & Charlotte Williams
1974; 182pp.
$3.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Another kind of self-regulation comes from the form used and the limits of size. Most of rural Egypt is spotted with large pigeon cotes. Pigeons provide both fertilizer and food. Each of the hundred-odd holes in the tower, which extend through the structure, provides an ingenious brooding nest which accommodates precisely enough young to maintain the rookery. The unfortunate extras, usually the smaller ones, fall inside the tower, to the bottom. All that the owner has to do is enter the base of the tower and pick up his daily harvest of squab. Because it is self-regulating and self-maintaining, the cote tends to support a larger, healthier stock.

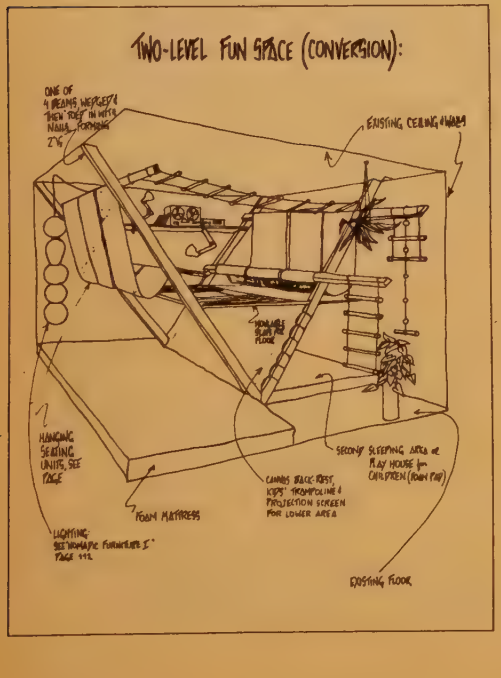
Nomadic Furniture

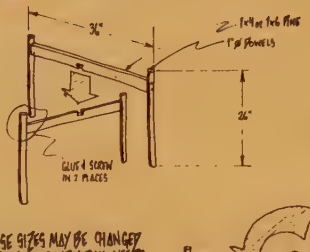
If you move your dwelling-stuff more than once every four years, this lightweight book can save you the aggravation of feeling so stupid while wrestling that heavy bed (couch, table, chair, bookshelf) down that narrow stairway to that overloaded car. Nomadic Furniture 2 *expands into hi-fi equipment, darkroom design, lights, furniture and play equipment for kids, room dividers, etc. Now if the publisher will reduce these two somewhat foamy books into one dense smaller one. . .*

–SB

Nomadic Furniture
James Hennessey & Victor Papanek
1973; 149pp.
$4.95 postpaid

Nomadic Furniture 2
James Hennessey & Victor Papanek
1974; 149pp.
$4.95 postpaid
both from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth





THESE SIZES MAY BE CHANGED TO SUIT YOUR INDIVIDUAL NEEDS. THE ¾" PLYWOOD TABLE TOPS ARE AVAILABLE AT MOST LUMBER YARDS, AND RANGE FROM 12" DIAMETER STOOL TOPS TO 48" TABLE TOPS.

SIMPLE TAKE-APART TABLE:

Irish Folk Ways

Irish crafts: house building, thatching, rockwork, wagons, turf cutting: Chapters on festivals, weddings and wakes. Ireland, where summer's end is referred to by a mountain farmer as ". . . a time when the dew is thinkin' of fallin' ".

–LK

Irish Folk Ways
E. Estyn Evans
1957; 324pp.
$5.95 plus postage
from:
Routledge & Kegan Paul Ltd.
9 Park St.
Boston, MA 02108
or Whole Earth

The erection of such simple houses as I have described did not call for the services of specialists. When the need arose the collective skills of a whole community were available, and one can readily see how prescribed methods were handed down in any particular area. 'The custom on such occasions wrote Lord George Hill—– is he speaking of Donegal in the years before the Great Famine—– 'is for the person who h the work to be done to hire a fiddler, upon which all the neighbours joyously assemble and carry, in an incredibly short time, the stones and timber upon their backs to the site, men, women and children alternately dancing and singing while the daylight lasts, when they adjourn to some dwelling where they finish the night, often prolonging the dance to dawn of day.' Like all work done in common, t thatching too was regarded as a sort of festival. In the Ar Islands 'from the moment a roof is taken in hand there is whirl of laughter and talk til it is ended, and, as the man whose house is being covered is a host instead of an employer, he lays himself out to please the men who wor with him.' Synge goes on to remark that much of the intelligence and charm of the islanders is due to the absen of a division of labour and to the wide development of ea individual. Truly it may be said that with the disappearan of the thatched house something more than a picturesque archaism passes from the land.

Tipi Makers

Tipi Makers sell nice looking tipis, floor coverings of sheepskin, cowhide and goatskin, and put out a nice booklet with beautiful photos of Indian tipis.

—LK

Tipi Makers booklet is 75 cents, brochure is free.

From:
Tipi Makers
339 15th Street
Shoppe 150
Oakland, CA 94612

Evergreen Tipi Makers

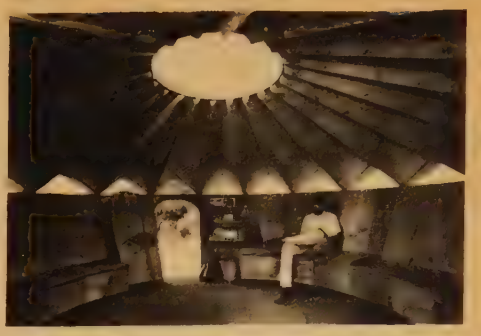
Tipis and sheepskin gloves, coats, hats and vests from Vermont.

Information from: *—LK*
Evergreen Tipi Makers
East Hardwick, VT 05836

More Tipis

Nomadics Tipi and Goodwin-Cole are still in business. See Pg. 100. *And* The Indian Tipi *is still the best book. Pg.* 100.

Yurts



Bill Coperthwaite has spent ten years developing his wooden yurts, with outward-sloping walls held together with a steel suspension cable. There are now three models— 12', 17' and 32' (diameter at eaves, not floor). They are a simple and inexpensive way of achieving a round space. I've talked to people in New England who have built Bill's yurts in the woods and they are all delighted with the results. See Pg. 101 *for details.*

—LK

Tipi Poles

Lodgepole pine tipi poles cut at 8,000' level in Wyoming, shipped from Texas. Cost 25 cents per foot (20' pole = $5.00).

Information from: *—LK*
Ashby Associates
2711 24th St.
Lubbock, TX 79410

Environmental Communications

A unique, varied series of color slide shows for colleges, schools, groups. Some titles: Mayan Architecture, Two Japanese Temples, Hardcore L.A., Half-Timber Construction in Southern Germany, Solar Energy, Expo '70, Inflatables, Islamic Architecture in Persia. Series are for sale, about $1 per slide, come with a descriptive brochure. Their catalogue in itself is a nice publication.

—LK

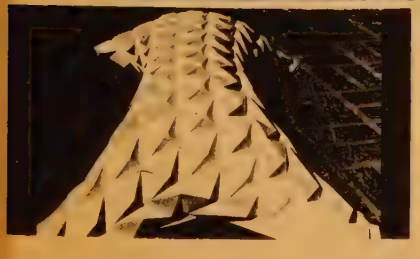
Environmental Communications Catalogue

free

from:
Environmental Communications
62 Windward Ave.
Venice, CA 90291

Street PAINTINGS

A Study of Environmental Reactionism



5

A DATE WITH CHOCOLATE GRAHAM

It's Sunday morning, and Captain Mediafreak is busy baking hash oil cookies to eat during the telecast of a football game.

"You have a blind date," he is saying to Tongue Fu, "that's what it sounds like to me."

"What is a blind date?"

"Well, first of all, a date is where you take a girl out to eat and to a movie and then you take 'er home and get laid. Traditionally speaking, that is. Of course, that doesn't apply to you because you've taken this vow of celibacy."

"I do not ever take a vow."

"Well, anyway, a blind date is where you've never seen each other before."

That afternoon, the first thing Tongue Fu says to Chocolate Graham is, "Would you like a hash oil cookie?"

"How do you know I'm not a narcotics agent?"

"I do not know. You did not say on the telephone."

"Let me put it this way: How do I know you're not a narcotics agent?"

"I am not."

"Never mind, I'm just teasing. If the narcs are this subtle, I'll join 'em. Come on in."

A couple-dozen folks of all ages are seated on cushions in her living room. When Tongue Fu gets comfortable, she begins to address the group....

Flashiebackie:

Say When Daddy is presenting young Tongue Fu with a personalized volume of the *I Ching*.

"Keep this with you always, Anteater, and consult it for guidance whenever you are in doubt."

"But how can a book know anything about my activities?"

"Open it," the old man grins, "and it will open you."

Tongue Fu accepts the book and opens it. Instead of there being pages inside, up springs an Oriental jack-in-the-box holding a placard on a stick, bearing this message in caligraphy:

THERE IS ONLY NOW—
AND THAT IS ALREADY GONE

"I vow to remember this message."

"No, Anteater, to make a vow is to not live in the present. It is to postpone your strength. You must develop your strength, moment by moment."

He takes a handful of marbles from his pocket and slowly tosses them, one after another, into the air toward young Tongue Fu, who in turn catches each marble by balancing it on the end of his tongue, which darts up with amazing accuracy.

"Ah, Anteater, how many hearts will you break with that tongue of yours? Cunnilingus would never be the same."

"I do not wish to hurt anyone. I shall abstain from such gratification of the flesh."

"So soon you are trying to live in the future."

"You are correct. I will take no more vows."

"Do you know, Anteater, what is the sound of one hand clapping?"

"Is there a correct answer to such a question?"

"Do not attempt to find it yet. Some day you will meet your mother and you will learn why it is that only through the grace of hundreds of thousands of dead souls do you experience the ecstacy of existence. That's the way the satori bounces...."

"All right, now, just to conclude my rap before I answer your questions," Chocolate Graham is saying, "I ought to explain what the CRAP Test is. The initials stand for Coincidence Rationalization and Practice. That's my working philosophy.

"It's one thing to accept the myriad of coincidences that started governing your life before you were even born— how our parents met, how their parents met, and then the inconceivable coincidence of a specific spermatozoa and ovum uniting to culminate in each of us— but it's another thing to set about deliberately arranging coincidences.

"Everyone of you is here today because of the coincidence of time and space which allowed me to slip you my card. But then you screened yourselves in as a function of your own curiosity.

"Now, I've read ten thousand books— I'm not exaggerating; if a footnote turned me on, I would seek out the book it came from— and when I try to summarize all the wisdom I've synthestized, it boils down on one level to the arbitrariness of institutions, in every civilization.

"We, as humans, are the only species that wars with itself in so many ways, because we're the only species that can conceptualize our own destruction. Which means if enough of us change our own personal direction— by exercising our power of choice to the fullest extent— then alternative, positive institutions will evolve.

"Two years ago I used a portion of my trust fund to purchase a large chunk of land in Oregon, and this summer there, Camp Crap will be dedicated to the celebration of consciousness. Spiritual leaders from all over the world will participate on a continuing basis, but that's a mutual con game, because I believe we're all capable of spreading influence.

"Just how we go about doing that will be probed at individual meetings. The only cost will be the dime you've already spent to phone me in the first place. Okay. Are there any questions?"

The first question comes from the man who delivered her calling cards the previous day.

"What I'd like to know is, how do you know which people to give your cards to?"

"Yes, well, being a pygmy has been of great help. In this country, the mere sight of me indicates that I'm a member of three oppressed classes: I'm a little person; I'm a person of color; and I'm a person of the female persuasion. I am a triple invisible. And I have rolled with that actuality. So, to answer your question, the basis on which I choose people to give cards to is, essentially, I eavesdrop on their vibes."

[Continued, page 541*]*

IL (Institute for Lightweight Tension Structures)—— Frei Otto

Tension structures are one of the better ways to cover a space with minimum materials. Such structures are not the floppy, buffeting, awkward canvas shapes we recognize in revival meeting tents. Rather, they are tough, semirigid membranes of startling grace that can withstand weather extremes without failure. The technique invites lightness and portability. Smaller scale structures can be executed by individuals at a technical level that results in useful performance.

This series of books represents the progress report from a group that works very hard, tries lots of things, and feels an unusual responsibility to publish its findings. (See **Tensile Structures: Volume One** *and* **Volume Two,** *Pg. 106). Most interesting to me is the work:* **Division of forms and constructions in living nature and technology as a basis for design and form determination** *(IL 3 and 4) The books are sharply printed on glossy paper and nicely bound. I always seem to learn a lot from Frei Otto and his co-workers. Apparently other people feel the same way, for my Frei Otto books seem to disappear forever soon after I get them. The relatively high price reflects the cost of translation, and appears to be in line with quality. IL 1—— Deals with determination of minimal net structures by use of soap film analysis and other methods. 56pp. $5.00 postpaid.*

IL 2—— Explores "The City In The Arctic". The covering of a large area which would be maintained as an artificial climate in a location otherwise not easily inhabited. Not exactly back to the land, but there are many exciting ideas presented in the form of feasibility studies. 57pp. $7.25 postpaid.

IL 3—— The biologist is recently concerned with the impact of technology. The technologist is forced to have an increasing awareness of biology. These papers explore "the question of human beings and the best possible environment for them", looking at the possibilities through various examples and metaphors furnished by nature. I found this volume to be especially good. Chapter headings include Animal Building, Urban Planning, Biological Knowledge and Social Transition." 79pp. $5.00 postpaid.

IL 4—— Continues from IL 3 fine discussions of structure in animals and plants. One example shows how a study of foot structure in ancient skeletons can reveal whether the animal was biped or quadruped. Chapter headings include Biomechanics, Statics of Extremities, Sandwich Structures in the Skull Capsules of Various Birds. 79pp. $7.25 postpaid.

IL 5—— A marvelous display of ideas for convertible roofs for structures of various sizes. Some examples of actually constructed devices in operation. Copious photos of amazingly realistic models. 398pp. $28.10 postpaid.

IL 6—— Covers an array of subjects including more biology, Spiderwebs, Structural Analysis of plants, some more soap film work, and a presentation of computer-drawn structures that can be viewed in 3D using special goggles provided with the book. 88 pp. $9.50 postpaid.

IL 7—— A comprehensive report on studies made for shade roofs made from plastic nets in a hot dry climate. Includes climate studies, various proposals, and a discussion of the economics involved. 88pp. $7.25 postpaid.

—J. Baldwin

IL 1 through 7
Ed: Berthold Burkhardt
Prices above
from:
Wittenborn & Company
1018 Madison Avenue
New York, NY 10021

Radiolaria Shell in an Electronmicrograph

Polyurethane Foam: Fire Hazard

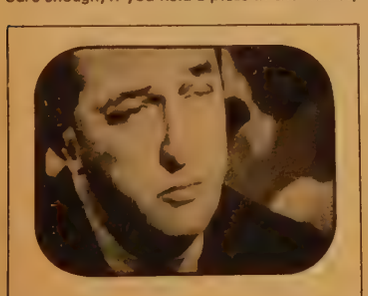
Polyurethane foam is the best insulating material known. However, it has recently been revealed (indications are that the plastics companies knew years ago) that foam is liable to a peculiar and dangerous type of fire hazard: if temperatures near the foam get hot enough, it can explode in flame and emit lethal gas.

About five years ago when I became interested in the material, I was told, as were others, that it was "self-extinguishing." Sure enough, if you held a piece in the flames, it would cease burning when you removed it. Yet in a more realistic test of what could happen in a home, ABC-TV news (in an excellent 1973 special on fire) showed a test where a paper-filled wastebasket was lit in the corner of a foam-sprayed home: in seconds the corner was burning fiercly. As the heat hit the ceiling, an avalanche of flames and poisonous smoke swept across the room. ABC News revealed that as early as 1969 the plastics companies knew of the hazard: they were warned by Underwriters' Laboratories that ". . . fire behavior of the polyurethane foam with adequate oxygen supply is one of very rapid flame spread, high early heat output rate, and produces large quantities of dense black smoke. This indicates that manual fire fighting of such a fire would be difficult."

In a well-known fire in a Bakersfield, Calif., warehouse, a welder's torch set fire to a foam sprayed interior wall, and the fire covered 700 feet of the building in less than 10 minutes.

Foam is made of oil and will burn like gasoline if it gets going. It should be covered by sheetrock or 1/2" plaster, and by the time you've done this, it's quite expensive.

—LK



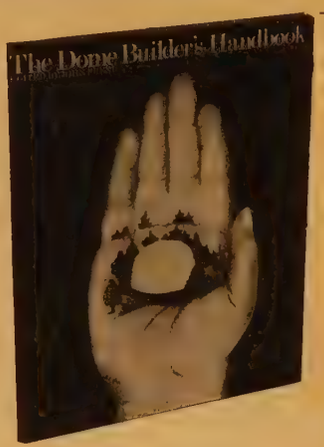
Polyurethane foam manufacturer responding to questions about flammability.

A foam insulated room explodes into flame from a wastebasket fire.

The Dome Builder's Handbook

The first in a series of dome exchange-communique books for people who want to build their own. They have the mailing list from Domebook 2 and are current organizers of domebuilding communication. In their introduction they say "If you want to build full fledged dome house, it should be because you want to live in that kind of space and are willing to go to a little extra trouble to have a house that is unique." Lots of models, and a variety of dome construction dramas from readers.

—LK



The Dome Builder's Handbook
Ed: John Prenis
1973; 107pp.
$4.00 postpaid

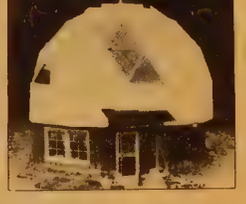
from:
Running Press
38 South 19th Street
Philadelphia, PA 19103
or Whole Earth

Another time, my helpers and I had the dome about three quarters complete when it became obvious that something was badly wrong. Struts refused to stay in place, hubs pushed outwards, while others pressed inwards. I pushed a pulled at base hubs, and shifted leveling blocks from one spot to another, to no avail. Naturally this was just the time when a crowd of curious bystanders gathered to ask foolish questions about the dome and why it wasn't worki Finally we found the trouble—— someone had put a short strut where a long one should have been. When that was corrected, the distortion disappeared, and so did all our problems. With proper color coding, the mistake would ha been obvious at once, or more likely, would not have happened at all.

Be sure tools and materials will be available when needed, and don't skimp on things like ladders and scaffolding. Trying to make do with makeshifts can get somebody hurt

•

After the dome was completed and all seemed fine becaus of the low cost, the happy sightseers, the attention and discussion, it was distressing to find that it was almost impossible to seal weather tight. Apparently others have h the same problem, but I didn't know that or how to profi from their experience, so it took at least three attempts t get favorable results. Metal strips and caulking worked for about a month, until the differences in expansion rates allowed the seams to pop open again. Resealing with heavi roofing compounds had the same dismal effect. Aluminum sheets from the Twin Falls newspaper printing department applied with staples worked much better. The most positi way to roof a dome that I have found is shingling. Asphalt shingles are easier to apply than cedar shingles, also the former cost less.



Dome Cookbook of Geodesic Geometry

Shows actual derivation of chord factors and angles and ". . . unlike Domebook One and Domebook Two, the chord factor results here are in close agreement with those of Buckminster Fuller's (A fact that is important when working with three frequency domes). . . . "

—LK

Dome Cookbook of Geodesic Geometry
David Kruschke
1972; 46pp.
$2.00 postpaid

from:
David Kruschke
2135 West Juneau Ave.
Milwaukee, WI 53233

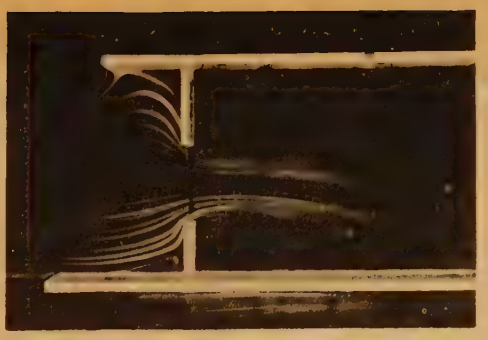
Design with Climate

Indian desert pueblos were built of massive adobe roofs and walls that afforded good insulation and delayed heat impact. Windows were small and orientation was such that summer sun was minimized, winter sun (when it was welcome) maximized. Today's buildings—— whether high rise or tract house—— tend to ignore climatic factors and orientation, depend upon prodigious amounts of fuel for cooling and heating. In this valuable, sensitive book, Victor Olgyay discusses the dwellings and responsiveness to climate of various peoples of the past, presents a thorough and readable survey of biology, meteorology and engineering as an approach to rational architectural design and practice. A blending of past solutions and current knowledge and technology to assist architects in tuning their buildings into natural forces.

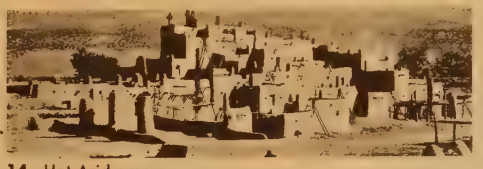
—LK

Design With Climate
(Bioclimatic Approach to Architectural Regionalism)
Victor Olgyay
1973; 190pp.

$25.00 postpaid
from:
Princeton Univ. Press
Princeton, NJ 08540
or Whole Earth



Effect of overhang on air flow. Note that overhang collects air streams which otherwise would escape; thus enhances incoming flow effect.



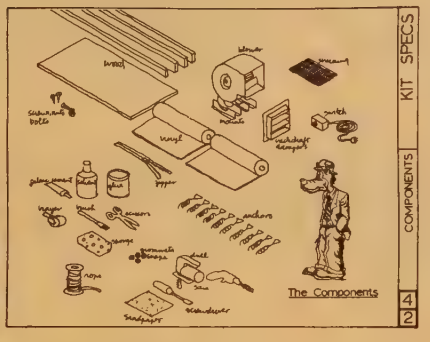
14. Hot-Arid area.

15. Hot-Humid area.

Lo Tech Air Domes

For puffed-up temporary structures, this looks like a considerable improvement over the now-out-of-print Ant Farm **Inflatocookbook** *(Pg.* **107***). Inflatables ARE fun.*

—SB



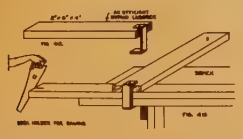
Lo Tech Air Domes
Poor Willie Productions
1973; 74pp.
Price unknown
write for details

from:
Poor Willie Productions
Boston Ctr. for the Arts
539 Tremont St.
Boston, MA 02116

A Manual on Building Construction

A useful, sensible book on building prepared by a missionary to Sudan in 1948 and just now reprinted. Building with earth, concrete and brick (including making a kiln for wood-fired burned brick), making clay roofing tiles, construction of a dirt roof, sanitation systems that won't pass the building codes but will work fine in sparsely populated, dry areas. Two annoying aspects of the book are the missionary attitude (what horrors they have wrought) and poor perspective in many of the drawings. Yet much of the hard building information is not to be found elsewhere.

—LK

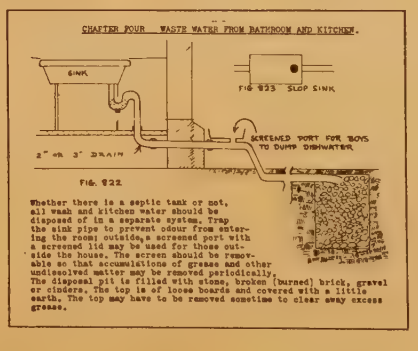


If the four foot stick has not enough weight in itself to hold the work, have a stone or another piece of wood handy and place it on the end of the holder at 'X'.

The grain of the centre piece runs cross wise to the cross tie. The metal tie from the top may be of wire, preferably doubled.

A Manual on Building Construction
Rev. Harold K. Dancy
1973; 360pp.
$2.35 plus postage (1 lb, 2 oz.)

from:
Intermediate Technology Development Group Ltd.
International Development Center
Parnell House, 25 Wilton Rd.
London SW1V 1JS



Frog Hand Woodworking Tools

A new mail-order woodworkers' tool service. Quality looks to be up to Woodcraft Supply (Pg. **146***) and in certain items (such as the line of spokehaves from Germany), there is a greater selection.*

—LK
[Suggested by Steve Goode, Jr.]

Catalog
$ .50
from:

Frog Hand Woodworking Tools
519 N. Wells St.
Chicago, IL 60610

56. LARGE SPOKESHAVE. Used for heavy cuts for sculptures, coopers, and free-form work. Cast iron. Length 18", cutter 2-9/16". Sh.wt. 1.2 lbs.

SMALL ROUTER.
Cast iron, plated.
length 3", cutter ¼"
$5.40pp.

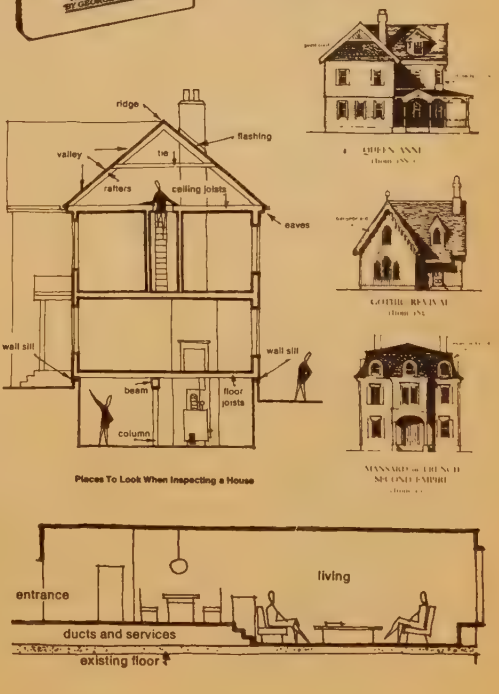
CURVED BLADE DRAWKNIFE.
Blade size 5½",
$7.90ppd.,
blade size 7-1/8",
$8.60pp.

Remodeling Old Houses

Living in a city and building a house are contradictions in good sense. "Fixing up" an old house to suit your life and modern materials without violating the old timer's integrity is the admirable burden of this book of advice. (See also **Old House Journal***, Pg.* **584***).*

—SB

Remodeling Old Houses
(Without Destroying Their Character)
George Stephen
1972; 232 pp.
$3.95 postpaid
from:
Alfred A. Knopf, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

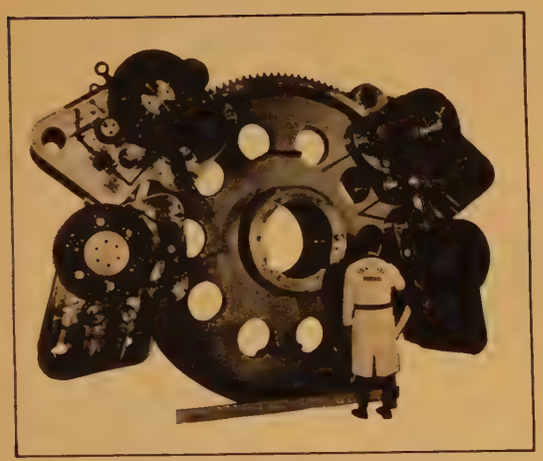


Soft Technology

The term "soft technology" was coined amid the British counter-culture in 1970. Technology which is soft is gentle on its surroundings, responds to it, incorporates it, feeds it. A nuclear power-generating station doesn't qualify.

Prodigiously experienced bricoleur (tinker) J. Baldwin (JB) evaluated and edited the Soft Technology section on the premise that "selling" alternative technology is no longer necessary. Delivering is.

—SB



Mr. J.E. Haeckl of Tool Steel Gear and Pinion Co.—Cincinnati, Ohio says: "We found that Ringfeder Locking Assemblies allow us to achieve the final adjustment of the Bogiflex roller eccentric carriers more accurately and at a lower cost than any other acceptable method."

(Hard Technology)

Twin Jacobs wind-electric plants at Integrated Living Systems, Albuquerque, New Mexico.

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Baldwin intro

Dear Stewart,

Sorting through this stack of papers and plans has been an enlightening experience, but I'd like to make it clear to Epilogue readers that I'm not an energy czar or anything. There are several points becoming easy to see, and I do feel qualified to raise them in an effort to save people needless work and frustration.

First, is that though solar, wind and methane energy are "free", the hardware that captures and stores the energy is not. Solar devices are easily made by a reasonably competent individual, but if they are not well thought out and carefully built, they become yet another "leaky dome" and may discourage people of good heart by repeated failure. Wind electricity becomes quite complex if you want more than a few lights. Homebuilt machines are notorious for failure, and even commercial ones have their problems. And there remains a remarkable lack of workable methane equipment.

In many cases, the problems arise from people working where intuition is no longer enough to ensure useful performance.

Second point is that most wind, solar and methane hardware is being designed and used in a very disjointed way. To be really energy efficient requires that both the energy producing equipment and the energy using *hardware be designed together as a system. Too often I see people trying to solar heat an A Frame house, a style that has a high heat loss. The result is that a large, energy and material consuming collector is necessary, and a fuel burning backup system is needed as well. Expensive. It seems that we can see the folly of fat cars, but not of fat houses. Unhappily the houses that many of us like best are energy hogs. There is a lot of attitude changing to be done yet in all parts of our society.*

Last point is that much of the thinking in these papers and plans exemplifies the errors I've noted. Plans for wind machines show no means of lubrication. Solar collector plans tell you (for $5.00) "if collector leaks rain, seal it", which is not so easily done. Readers who partake from these offerings will note a considerable disagreement and even hostility amongst the people engaged in energy work. Many of the schemes being sold are for equipment that has not been adequately tested. The few that list performance at all are pretty vague. But the true test of a solar machine is "were you warm last Feb?" and time will show who's best soon. Meantime, there is a lot to be discovered yet.

If these papers may be taken as typical, there is also a lot of work to be done in reducing the NEED for energy. Except for a very few projects, most work has only lightly touched on that. In these papers, there is scarcely a hint of thought concerning the advantages of materials economy, size reduction, low-energy-subsidy designs and the possibility of eliminating hardware altogether. For most of us, the changes coming in point-of-use of energy will touch the way we live most noticeably.

—JB

Energy, Environment and Building

This *compendium is what a compendium can and should be. All currently available information, where it came from, bibliographies, and examples of the state of the art are described and illustrated. Areas covered include energy conservation, solar space and water heating, wind and water power, composting and methane, water conservation, and "autonomous housing". Mr. Steadman has made the attempt to include all known projects and proposals, and the result is a massive, mind-boggling book that stands in a class by itself. It's the book of those who are doing it and making it work. Mr. Steadman is also one of the few presenting information on conserving energy. The book is not yet in print, and obviously the higher the demand, the less it can cost. If it interests you, and we hope it does, send your inquiry and encouragement to Mr. Steadman.*

—JB

Energy, Environment and Building
(A Report to the Academy of Natural Sciences, Philadelphia)
1974; 289pp.

at:
Academy of Natural Sciences
19th & The Parkway
Philadelphia, PA 19103

Yanagimachi Solar Houses I and II

Back in the architectural context, Fuller again has pointed out how the overall three-dimensional form of Manhattan Island, with its thousands of separate building 'spikes' could hardly have been better devised as a means of increasing surface area and so of losing heat— much like the cooling fins on a motorcycle engine or a car radiator. For summer cooling in Manhattan this is of course a good thing. Fuller's proposal to cover the island with a single giant dome is partly based on a notion of reducing heat loss by an effective reduction of this enormous surface area.

•

Commercial firms active in the field of solar power applications applications include McDonnell Douglas Astronautics of Huntington Beach, CA; Gulf General Atomics Co. of San Diego; Honeywell Inc, in Minneapolis; The Aerospace Corporation of El Segundo, CA; and Sandia Laboratories of Albuquerque, New Mexico. Companies involved in building applications or in the design of low temperature flat-plate collectors include Texas Instruments, the Lockheed Missiles and Space Co. in Palo Alto, and Thermo Electron Corp. of Waltham, MA. Several of these companies are working in collaboration with NSF-funded university research groups.

•

Although some designers have placed the heat storage reservoir outside the building, this is not ideal from the point of view of heat loss. The reservoir must always be well-insulated, but nevertheless some heat will still escape; and if the reservoir is placed inside or beneath the building, say in the basement, then this escaping heat passes to the interior spaces. A further advantage of placing the storage tank in the basement is that the conductivity through the surrounding earth is low, and even if heat does escape to raise the temperature of this earth, it may be retrieved again in part when the temperature of the tank drops. In effect the earth acts as additional storage capacity. (In a water heat storage system, placing the tank below the collector means that the water can be drained out of the collector by gravity at the approach of freezing weather, and on winter nights.)

Hidden Waste

This pamphlet names and thoroughly annotates sources for the energy-use information it contains. This stands in welcome contrast to the usual over-emotionalized half-truths and unsubstantiated claims of villainy that one finds all too often in the media. Though intended for serious students, the paper is not difficult reading. It illuminates the villains and occasionally indicates possible soft underbellies. The author cites a wide variety of information sources including the AEC, Bureau of Mines and other U.S. Government publications as well as Environmentalist writings. Needed facts for environmental fighters.

—JB

Hidden Waste
(Potentials for Energy Conservation)
David B. Large, Ed.
1973; 137pp.
$3.00 postpaid

from:
The Conservation Foundation
1717 Massachusetts Ave. NW
Washington, DC 20036

[One] spur to energy growth is residential use; homes now directly use 20% of our energy. The major contributor to the growth of residential use has been electricity; between 1960 and 1970 it grew by 130%. But the number of wired households increased by only 24%. Thus the use of electricity per household increased by 84% during this ten year period. While certain appliances have become more energy-intensive (for example, a frost-free refrigerator uses 50% more energy than a conventional one), the major contributor is increased purchase and use of appliances: affluence.

•

21% of the total U.S. energy budget is devoted to the automobile.

•

During the period 1960-1970, the number of automobiles *per capita* in the U.S. increased from 0.34 to 0.44 (an absolute increase of 46%). Personal per-capita dollar costs of car ownership, measured in deflated dollars, increased from $308 per year to $385 per year. These per capita figures are particularly astounding when one realizes that there are approximately 65 million Americans under 16 years of age, and 100 million— almost 50% of the population— who have no driver's license.

•

An example of what can be done to shift urban travel from cars to busses was described recently in the trade journal **Public Utilities Fortnightly:**

Stockholm, the capital of Sweden, wants to eliminate autos from its streets. As the first step in its campaign, the Public Transportation Department now offers a $10 monthly pass, good for travel anywhere and any time on Stockholm's subway, busses, trains, and trams, to a distance of 40 miles outside the city. Under the pass system, commuters save as much as 50 percent on their monthly transport expenses.

Soon after the passes went on sale, Stockholm's busses and trains became significantly more crowded, the motorways less so. The Transportation Department, which had been losing passengers at a rate of 2 to 4 percent a year, plans now to add supplementary vehicles.

Stockholm's busses may be more crowded at present, but they also move faster. Since about 80 percent of bus passengers now offer passes instead of cash, the time spent on fare collection has been reduced from about two minutes to forty seconds per bus stop in the central city.

Resources. *Ten to twelve dollars worth of recoverable products is found in each ton of municipal incinerator residue*

Energy Primer

The Energy Primer *is still under construction as I write this, so I visited the workroom and looked at what had been done, and talked a few hours with Chuck Missar, one of the editors. The book is being produced by the Whole Earth Truck Store, New Alchemy West, Ecology Action Palo Alto, and Alternate Sources of Energy. It's sponsored by Portola Institute. Chuck says:*

The **Energy Primer** is a blend of several concepts. First, we have covered the subjects of solar, wind, small-scale water, BioFuels (methane, wood, alcohol, aquaculture and agriculture), architecture and energy conservation in one volume. Within each major energy source chapter we have presented a "textbooky" article on the subject, trying to introduce readers to the material in a scientific, reasonably rigorous way. (John Yellottt has written the solar article, Richard Merrill has written the BioFuel article, and so on.) We then surveyed the significant books, articles and hardware in each area and reviewed most of them in detail, listing availability and cost. Then comes state-of-the-art (who is doing what, where and how) as best we could put it together at the time. These, and short sections on national energy policy, geothermal and transportation, make up the **Energy Primer.**

Information in the **Primer** will be updated in later printings, but as a regular source of information **Alternative Sources of Energy Newsletter** will be the place to look.

If we have to do anything right, we said early in our work, we must dispel the myths concerning renewable forms of energy and encourage realistic, workable plans, systems and hardware. We think we have put together a working tool to help people create their own energy sources. In addition, we have stressed accurate and organized record keeping, safety on the job and with the hardware, energy conservation (something we have to get good at before starting a hardware trip) and the idea that we have to become our own "experts."

—Chuck Missar

I looked at the completed chapter on solar by John Yellott and found it to be a meaty presentation of the basic numbers you need to do experimental work with solar energy. I'm looking forward to having my copy so I won't have to look that information up in a dozen different places any more. This book has been needed for a long time, and it looks as if it's a good one.

—JB

$4.50 USA
$5.00 Elsewhere
$2.00 Microfiche

from:
Whole Earth Truck Store
558 Santa Cruz Ave.
Menlo Park, CA 94025

SOFT TECHNOLOGY

ENERGY BY THE PEOPLE-- INTRODUCTORY BOOKS

These books all present an overview of various "alternative" energy sources, systems, and hardware. Some also contain social and political comment. Most are not very critical, except of the establishment, and offer a considerable amount of highly conjectural fantasy together with loosely detailed proposals for hardware. Few hard, proven proposals for anything are displayed. There's very little discussion of reducing the need for energy. But you can learn a lot from any of them, especially if you are not well read in this field. You might retain a critical mind as you read, however, as there is still a long way to go before controversy subsides and the better strategies are clearly visible. I'll probably catch hell for this glib review, but I think it's past time for some good books that go beyond merely raising a reader's interest. A lot of hard stuff is known now, what-works information, and how much it costs. Let's have a real workbook soon, friends.

–JB

Alternative Sources of Energy: Practical Technology and Philosophy for a Decentralized Society

Mostly reprints from ASE, with reader feedback. Good bibliography. Large format.

–JB

Alternative Sources of Energy: Practical Technology and Philosophy for a Decentralized Society
Sandy Eccli & others, Eds.
1974; 279pp.
$4.00 postpaid
from:
ASE
Rt. 2 Box 90A
Milaca, MN 56353
or Whole Earth

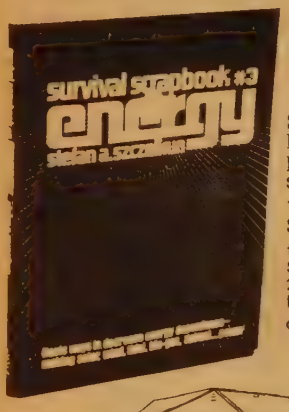
"The process of making fuel alcohol is no different from making high proof moonshine. You need a mash to ferment, a still, and a smokeless heat source. The mash can be made from anything which contains sugar or starch for yeast to convert to alcohol:

wood chips	sugar beets
fruit	refined sugar
potatoes	sugar cane
corn	corn stalks
oats	molasses
wheat	stale bread

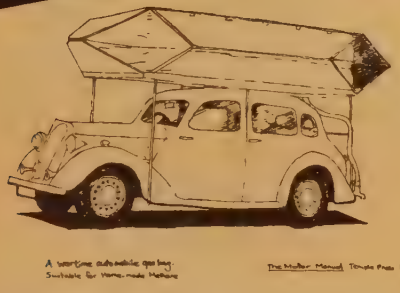
Survival Scrapbook No. 3: Energy

Articles, comments and a selection of hardware, mostly British.

–JB



Survival Scrapbook No. 3
Energy
Stefan A. Szczelkun
1973; 57pp.
$3.95 postpaid
from:
Schocken Books
200 Madison Ave.
New York, NY 10016
or Whole Earth



A wartime automobile gasifier. Suitable for home-made methane

The Mother Manual Temple Press 1973

The Mother Earth News Handbook of Homemade Power

Mostly information from past Mother issues, but has some original work too. Good on water power.

–JB

The Mother Earth News Handbook of Homemade Power
Mother Earth News Staff
1974; 374pp.
$1.95 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
and

Mother Earth News
P.O. Box 70
Hendersonville, NC
28739
or Whole Earth

The best answer to the problem of chimney fires, of course, lies in preventing the buildup of inflammable residue in the first place. Every now and then, some people give their stoves' fireboxes a sprinkling of salt. . . which seems to help keep the chimneys soot-free. I do the same thing with a commercially available (from M.E.E. Company, 1137 S.W. Hanford, Seattle, Washington 98134) product called Red Devil.

•

One day this gal got herself a secondhand bathtub, painted it black inside and dragged it out to a sunny clearing. From then on she filled the receptacle with water in the morning and came home each evening to a hot dip.

Producing Your Own Power

Mostly reprints from various sources with a few original articles. Excellent source listing.

–JB

Producing Your Own Power
Carol Hupping Stoner, Ed.
1974; 320pp.
$8.95 postpaid
from:
Rodale Press, Inc.
Organic Park
Emmaus, PA 18049
or Whole Earth

Nova Mfg. Co., 263 Hillside Ave., Nutley, NJ 07110. Their catalog lists over 1,000 electronic DC-to-AC inverters.

O'Brock Windmill Sales, Rt. 1, 12 St., North Benton, OH 44449. Windmills, towers, and rapair parts from Baker, Dempster, Heller-Aller, and Aermotor (these units are for pumping water only); also, Davey hydraulic rams.

Palley Supply Co., 2263 E. Vernon Ave., Dept. M-70, Los Angeles, CA 90056. Source of surplus aircraft generators.

Sensenich Corp, PO Box 1168, Lancaster, PA 17604. This manufacturer of wooden propellers is interested in working with wind power plant innovators and generator manufacturers.

Patented Mfg. Co., Lincoln Rd., S. Lincoln, MA 01773. Manufacturer of a simple stovepipe heat exchanger that uses metal fins to radiate heat.

Emil Dahlquist, 31 Morgan Park, Clinton, CT 06413. Manufactures a fireplace rotisserie and a tin fireplace oven. These designs are used with a special grate that is raised at the front, permitting heat from the coals to radiate out into the room.

Shenandoah Mfg. Co., PO Box 839, Harrisonburg, VA 2280 Manufacturer of wood burning brooders which, according to the company, can function as furnaces for small dwellings. Available by mail order.

Life Support Technics

Besides designing and building solar and structure systems, Zomeworks does occasional publishing and conference organizing–– more inventive, if possible, than its devices. The most recent conference (Halloween, 1972) brought together a zoo of old-timers and outlaws in the alternative energy spectrum. Here are excerpts from the proceedings.

–SB

Life Support Technics
1972; 31pp.
$2.00 postpaid
from:
Biotechnic Press
Box 26091
Albuquerque, NM 87125

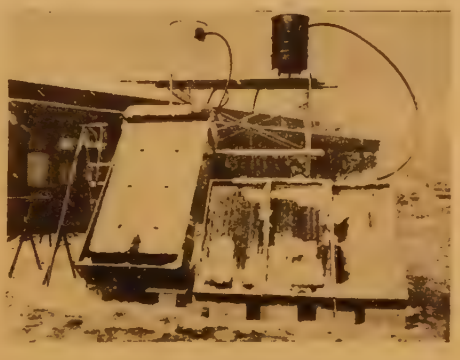
Some of the speakers who clearly explained their theories and methods found that. . . those who gathered to listen to their talks were not serious enough–– did not pay attention to what they were saying or demonstrating, that they didn't ask the right kinds of questions–– that whatever it was that brought them to the same meeting was at best accidental, but was perhaps a lie imbedded in society that brings together opposites, that surrounds prophets not with those who would catch fire with their message, but rather groups that drown and trample them. But in a deceitful way–– nodding their heads–– "Yeah man–– right on–– you got it!" . . .

•

Euclid's parallel axiom was found to be independent of the other axioms of Euclidean geometry. You can negate it and still find models in which everything built from the other axiom thrives. This same kind of study is needed in our technology. . . . Technology quickly links itself into the world where you can't bite it without biting yourself. Every invention and method that facilitates the production of anything we use is taken in, achieving immunity from questioning. Fortunately we have history. There is proof that life existed before the transistor, TV or the internal combusion engine.

–Steve Baer

•



Steve Baer: I think we're finally seeing the end to this snow storm. It looks as if the sun is coming out. There hasn't been any mention made of the solar heaters that are out there in front. It's rather discouraging to explain something that's not working.

Actually in the Depression period, before the Second World War, there was a movement called the Decentralist-Distributist Movement in America in which a great many people were discussing the very things you're discussing now–– not in the same language–– but the need for reaffirmation of the way of life adapted to the land and not tied in heavily to urban concentration. Go back to the 1840's–– there was a strong period of idealistic community building, trying to recapture these same roots. As a matter of fact, these ideas are part of the original American ideals–– the whole Jeffersonian concept of the kind of society that we were going to build here–– small, land-based, largely self-governing, self-provisioning communities, which were tied together in a federation. I think all these attempts are an attempt to recapture the original American dream.

–Peter Van Dresser

•

If you are going to build a wind generating system, you should plan to spend about 10 hours studying for every hour of construction. A lot of this stuff gets very technical, but don't let that scare you off. Just jump right in and learn the answers. The three biggest resources you have are people, the phone book, and libraries. There are people walking around who have the answers to a lot of the questions and problems you will run up against. There's a university in Albuquerque with an electrical engineering department. Talk to people who sell wire. Call the manufacturer of batteries. If somebody tells you you need an external shunt (for example), go to the library and find out what that is.

–Bob Reines

•

**One frame from the film "Bighorn" (26 min. $25.00, from Stouffer Productions, Box 15057, Aspen CO 81611.)*

Solar Cream

Direct Use of the Sun's Energy *by Farrington Daniels (Pg.* **124***) is still the best book on the subject.*

Motorola Automotive Products, Inc. 9401 W. Grand Ave., Franklyn Park, IL 60131. Transistor-regulated alternators.

Lakeside Equipment Corp., 1022 E. Devon Ave., Bartlett, IL 60103. Manufacturer of the Spiragester which, according to **Solar Energy Digest**, can be used as a methane gas producer.

Arkla Industries, Inc., 950 E. Virginia St., Evansville, IN 47701. Manufacturer of absorption air conditioning equipment. Some models are adaptable to produce cooling, when powered by water heated in flat plate collectors.

Enthone, Inc., Box 1900, New Haven, CT 06508. Aqueous bath solution for blackening the steel surfaces of flat plate collectors.

Ram Products Co., 1111 N. Centerville Rd., Sturgis, MI 49091. Plexi-view acrylic mirrors that are lighter than glass and have excellent optical qualities.

Sky Therm Processes and Engineering, 945 Wilshire Blvd., Los Angeles, CA 90017. Has developed a modular roof system, in which panels of movable insulation allow water beds in the ceiling to absorb heat from either the outside or the rooms below.

Solar Heating, Cooling, and Energy Conservation Directory

At last. . . a comprehensive directory, available September, 1974.

—JB

Solar Heating, Cooling, and Energy Conservation Directory
400pp.
$15.00 postpaid

from:
Carolyn Pesco
Environmental Action of Colorado
1100 14th St.
Denver, CO 80202

Solar Energy for Pacific Northwest Building

Data and charts showing (unproven) possibilities of solar heating in this region. Useful (and essential) but only if you live there.

—JB

Solar Energy for Pacific Northwest Building
1974; 59pp.
$3.00 postpaid

from:
Center for Environmental Research
School of Architecture
Univ. of Oregon
Eugene, OR 97403

Use of Domestic Hot Water for Space Heating

A.S.H.R.A.E. booklet outlines the possibilities and analyzes the economics of heating a home by means of an oversized hot water heater. It turns out that it makes sense in many cases, and a bit of thought should be able to hook this knowledge to a solar collector. Hmmm?

—JB

Use of Domestic Hot Water for Space Heating
1972; 27pp.
$10.00 postpaid

from:
American Society of Heating, Refrigeration & Air-Conditioning Engineers, Inc. (ASHRAE)
Circulation Sales Dept.
345 E. 47th St.
New York, NY 10017

Solar Energy

Steve Baer explains solar energy and a great many other things in this sleazy-looking but very useful little book. Reprints from a series of articles in Albuquerque's **Tribal Messenger** *show many types of collectors and other devices giving a good feeling for how they came to be designed that way. Formulas too. I find that I refer to this "book" more often than formal texts.*

—JB

Solar Energy
Steve Baer
1973; 30pp.
$3.50 postpaid

from:
Zomeworks
P.O. Box 712
Albuquerque, NM 87103

When people want to get rid of a kind of insect one method is to not kill the insect but to raise vast quantities of sterile male insects and release them periodically. The sterile insects make up the major portion of the male insect population and thus most females after mating are infertile. After a few generations the insect population is down to a handful. I see the projects and research teams chosen by the government as sterile. . . . Harry Thomason and his son Jack have built three successful solar heated houses in Washington, D.C. They live in one and rent the other two. Certainly a successful small solar energy industry. But Harry was kept in the audience. Harry has not received money from NSF or any other government agency.

We listened to hours of doubletalk. It is a mark of wisdom and farsightedness to recommend and study solar energy. But if you live in a solar heated house or build solar heated houses you are probably somewhat crazy.

•

FLOOR:

The floor should be brick, concrete slab, mud or tile on concrete. Such a floor provides a large heat reservoir for a room. The floor should not be covered with carpets since this insulates the room from its valuable heat battery. A few rugs make little difference. The floor should be insulated, not from the ground below it, for this adds to its capacity to store heat, but from the ground around it. This is most commonly done by placing rigid foam insulation to a depth of a couple of feet around the footings.

Economics of Solar Collectors, Heat Pumps and Wind Generators

A neat, hard pamphlet outlining the true costs of building, running and maintaining innovative supposedly energy-efficient systems. The paper clearly shows that non-integrated systems are unlikely to be economical, and that all details of a design must be completely worked out both in theory & practice if success can be expected. "It is always surprising to me how a comparatively simple idea ends up by being such a complex final installation. . ." (To read this you need a £-$ table)

—JB

Economics of Solar Collectors, Heat Pumps and Wind Generators
(Working Paper 3)
Gerry E. Smith
1973; 31pp.
$1.40 postpaid

from:
University of Cambridge
Department of Architecture
Technical Research Div.
1 Scroop Terrace
Cambridge CB2 1PX
England

Alternative Sources of Energy Bibliography

One of the few bibliographies on energy subjects now in print, and an inexpensive one at that.

—JB

Alternative Sources of Energy
(Bibliography Issue!)
No. 9, Feb. 1973; 40pp.
75¢

from:
Alternative Sources of Energy
Rt. 2, Box 90-A
Milaca, MN 56353

Solar Energy Handbook

This much-needed book collects under one roof the numbers, formulas, and facts you need to design solar devices. I quote the author: ". . . the book is aimed at the non-engineer. However, basic theory is not shunned since a lack of true understanding of basics practically guarantees serious design errors." However, in an effort to make sure you don't leave anything out of your considerations, he includes a large mass of "check list" material which conceals the facts you may be trying to find, and this makes the book a bit difficult to use. The goodies are in there, though, and it beats trying to collect your information from a dozen separate sources.

—JB

Solar Energy Handbook
Henry Landa
1974
$9.00 postpaid

from:
F.I.C.O.A.
2901 S. Wentworth Ave.
Milwaukee, WI 53207

Heat Storage Sizing

The heat bin capacity depends upon (1) per unit storage capacity based on the unit of area and (2) the total area of the collector.

Total heat bin capacity = Collector area x B

B = storage capacity in BTU/degree F. per square foot of collector area; recommended B is 20.

Therefore, Total heat bin capacity equals 800 square feet multiplied by 20 BTU/degree F. per square foot or 16,000 BTU/degree F.

Converted to physical units of volume of material, go to the Table of Specific Heat Capacity of Storage Materials.

If water is the storage material; then each cubic foot of water will absorb 62.4 BTU/degree F. and the volume of the heat bin would be:

$$\text{Heat Bin Volume} = \frac{\text{Total Heat Capacity BTU/deg. F.}}{\text{Unit Heat Capacity BTU/cu ft deg F}}$$

$$= \frac{\text{16,000 BTU/degree F}}{\text{62.4 BTU/cubic foot, deg F.}}$$

= 256 cubic feet of water

If rocks (pebbles) with 30% voids are used; then each cubic foot of rock will absorb 26 BTU/ degree F. and the volume of the heat bin would be:

$$\text{Heat Bin Volume} = \frac{\text{16,000 BTU/degree F}}{\text{26 BTU/cubic foot, degree F.}}$$

= 615 cu. ft. of rock with 30% voids

Storage bin wall construction and insulation are a matter of personal preference, however, vertical cylindrical bins tend to conserve heat better than horizontal storage designs.

•

Low Temperature Engineering Application of Solar Energy

Though published in 1967, this booklet presents much useful information needed by the serious solar collector designer. It's technical, though not inaccessible to a non-engineer if he can read tables and not panic. A.S.H.R.A.E. publications are of very high quality and utility. This is no exception. Chapters include Availability and Measurement of Solar Radiation; Design Factors Influencing Collector Performance; Selective Surfaces; Potential Utilization of Flat Plate Collectors In Tropical Regions.

—JB

Low Temperature Engineering Application of Solar Energy
(The Committee on Solar Energy Utilization of the ASHRAE)
1967; 78pp.
$8.00 postpaid

from:
ASHRAE
Circulation Sales Dept.
345 East 47th St.
New York, NY 10017

U.S. Department of Commerce Information Service

The U.S. Department of Commerce has instituted a customized information service that will search the department's files for reports on Government-sponsored research in different areas. A custom search costs $50. Or, for $20, you can select from the large number of searches already completed on the subjects of remote sensing, computer usage and planning, methods of extracting or converting energy from thermonuclear fusion reactors, and the like. Call the National Technical Information Service, (703) 451-0560.

[Suggested by Doris Herrick]

Fafco

Simple plastic collectors for heating pool water, cannot be used for high temperatures, but are certainly effective and well-engineered for this use. Could also be adapted to heat a methane digester.

—JB
[Suggested by Bruce Kelly]

Fafco solar swimming pool heater
$90.00 /40 sq. ft. panel
$72.00 /32 sq. ft. panel
$96.50 Automatic controls
$4.00 Installation Manual

Catalog
from:
Fafco Inc.
138 Jefferson Dr.
Menlo Park, CA 94025

The pool heater is trying to raise several thousand gallons of water to around 80° F while the Hot Water Heater is trying to raise less than a hundred gallons to 140° F. By circulating a large volume of water rapidly through the solar collector, thereby keeping the collector cool, the Pool Heater can take full advantage of the fact that solar collectors are much more efficient working at low temperatures. This fact escapes many people who intuitively feel that high temperature equals high efficiency.

•

Almost universally, high-temp solar collectors are made of metal to withstand the temperatures generated by the greenhouse effect. High-performance solar collectors with black, selective surface coatings and multi-level glazing experience temperatures well above 300° F. However, because collectors for Solar Pool Heaters do not have to withstand such high temperatures, they can be made out of plastic.

Solarator

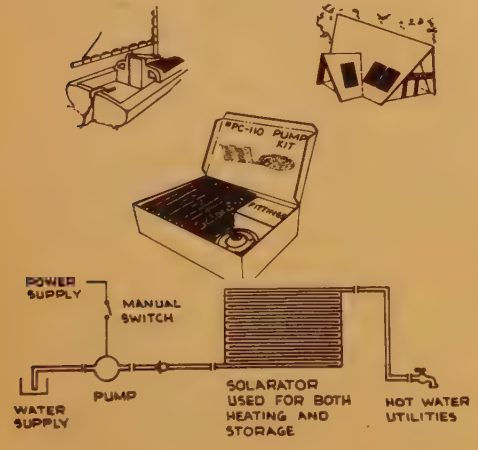
A clever water-filled plastic bladder that serves as a collector. Brochure is rather vague on some essential details, but reports are that it works.

—JB
[Suggested by John DeHaven]

Solarator
$29.95
$45.00 cover

information:
Fun & Frolic Inc.
1001 Smith St.
Algonac, MI 48001
or

Environmental Energies, Inc.
11350 Schaefer
Detroit, MI 48227

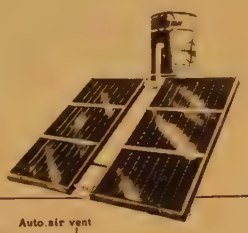


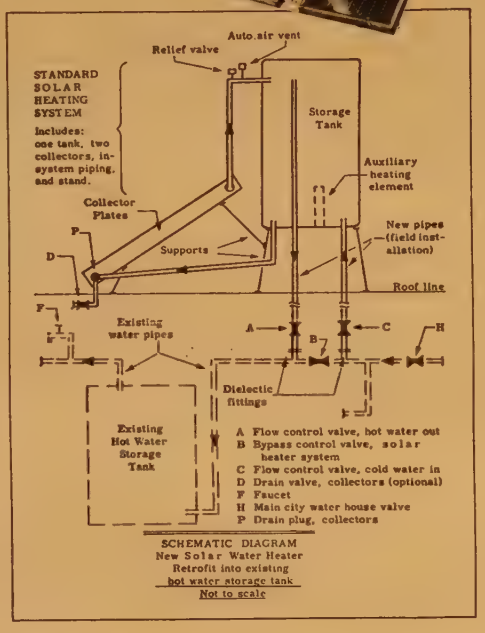
Sol-Therm Water Heater

A flat plate type water heater system in production. But note, as with most systems produced in small quantities, the price is very high when compared to conventional systems at this time: $595.00 vs. $59.95 for a Sears heater the same size! It would take awhile to make it pay. . .

—JB

Sol-Therm Water Heater System
$595.00 up
Catalog
from:
Sol-Therm Corp.
7 West 14th St.
New York, NY 10011





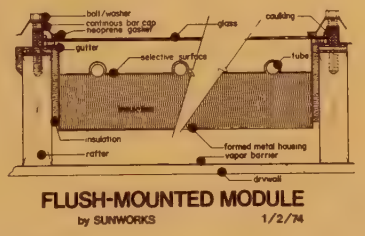
Sunworks

Make flat plate collectors for either surface-mounting or flush mounting. Also engineering service.

—JB

Sunworks flat-plate solar heat collector
Modules **$164.00** up
(about $8.00/sq. ft.)
$1.00 Technical data and drawings
$10.00 Criteria for preliminary design of Solar Heated buildings

from:
Sunworks, Inc.
669 Boston Post Rd.
Guilford, CT 06437



FLUSH-MOUNTED MODULE
by SUNWORKS 1/2/74

SAV Solar Water Heater

Heats and stores water in cylindrical units. Probably not practical for freezing climates. Anyone out there using these?

—JB

SAV Solar Heater Catalog
and prices from:
Fred Rice Productions, Inc.
6313 Peach Ave.
Van Nuys, CA 91401

SOLAR WATER AND SPACE HEATING

Generally speaking, these devices are better developed than either wind or methane equipment, but the hard-to-perfect details in most plans and commercially available units are often poorly thought out. Many designs, for instance, do not specify safety valves or expansion tanks for collectors capable of overheating to the point of explosion. Few plans mention that anti-freeze in potable water is a deadly poison, and that special care should be taken to design systems that use it in a fail-safe manner. There is very little discussion of actual output, so it's difficult to predict how well your installation will perform. It's too soon to tell which designs are superior under what conditions. A solar device must last long enough to pay for itself. Most work we've seen has not yet progressed to the point of known lifetime and reliability. Experimenters should keep notes and data and share them so as to encourage the evolution of successful designs, and reduce duplicate mistakes.

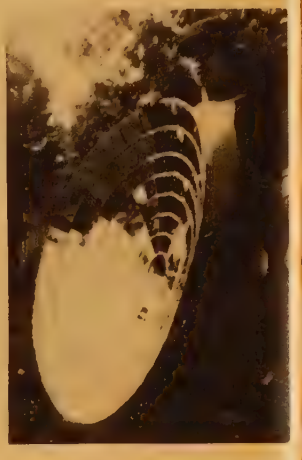
—JB

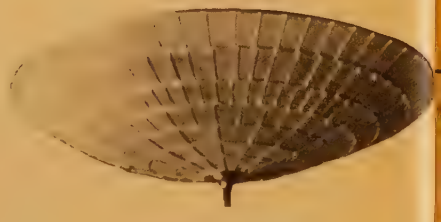
Sun Systems

Instructions (with materials and price list) for making parabolic and other solar concentrating mirrors.

—JB

$2.00
from:
Ken Fischer Sun Systems
716 Main St.
Berlin, PA 15530

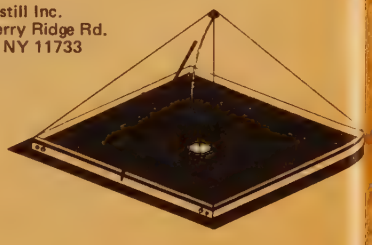




Solar Sunstill

Can make up to 6-1/2 gallons a day.

Sunstill Catalog
from:
Solar Sunstill Inc.
15 Blueberry Ridge Rd.
Setauket, NY 11733



Brace Research Institute Plans

A better grade of plans than most. Crude, aimed at underdeveloped countries and people adjusted to a less technical life.

—JB

How to Make a Solar Still (Plastic Covered), by A. Whillier and G. T. Ward, 9 pp., January 1965. Revised February 1973. $ .90.

How to Make a Solar Steam Cooker, by A. Whillier, 6 pp., January 1965. Revised October 1972. $ .90.

How to Heat your Swimming Pool using Solar Energy, by A. Whillier, 2 pp., January 1965. Revised February 1973. $ .50.

How to Construct a Cheap Wind Machine for Pumping Water, by A. Bodek, 12 pp., February 1965. Revised February 1973. $ .90.

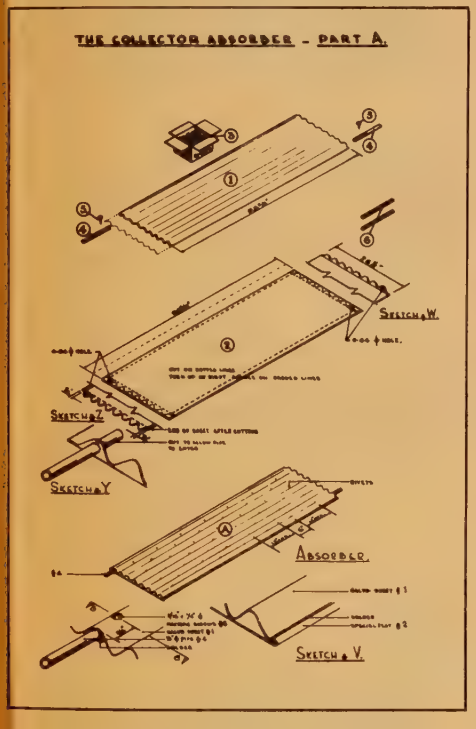
How to Make a Solar Cabinet Dryer for Agricultural Produce, by T. A. Lawand, 9 pp., March 1966. Revised March 1973. $ .90.

Instructions for Constructing a Simple 8 sq. ft. Solar Still for Domestic Use and Gas Stations, by T. A. Lawand, 6 pp. Revised September 1967. $ .90.

Plans for a Glass and Concrete Solar Still, by T.A. Lawand and R. Alward, 9 pp., December 1968. Revised October 1972. $3.50.

Production Drawing for Solar Cabinet Dryer by O. Goldstein, June 1973. $1.50.

from:
Brace Research Institute
MacDonald College of
McGill University
Ste. Anne De Bellevue 800
Quebec, Canada

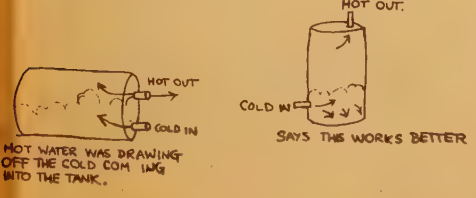


Solar Water Heating

A crude little booklet loosely defining much of the information you need to solar heat water. Few actual construction details, but most basic facts needed are there.

—JB

Solar Water Heating
(For the Handyman)
Steven Paige
24pp.
$1.50 postpaid
from:
Steven Paige
Box 714 H
Arroyo Grande, CA 93420



Dr. Farber

Dr. E. A. Farber, working at the University of Florida, has done an impressive amount of working solar hardware including stills and heat engines. You can get copies of papers and a bibliography of his papers.

—JB

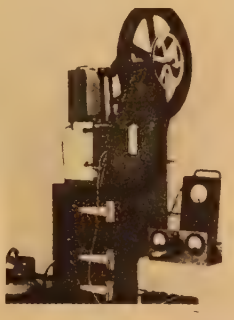
from:
University of Florida
Solar Energy &
Energy Conversion Lab.
Gainesville, FL 32611

View of some of the solar energy conversion equipment in the laboratory.

The first step in utilizing solar energy is to find materials which will withstand the exposure necessary in the equipment to be built.

•

5-foot solar furnace



1/2 horsepower closed cycle hot air engine

Closed Cycle Hot Air Engines

There are two basic types of hot air engines. The closed cycle type encloses a certain amount of air which can be pushed back and forth by a plunger between hot and cold surfaces. When the air is in contact with the hot surfaces it is heated and thus increases the pressure in the engine and when in contact with the cold surfaces it is cooled, thus decreasing the pressure in the engine. A power piston is pushed down when the pressure in the engine is high and returns due to flywheel action when the pressure is low. So every down stroke is a power stroke. With proper timing of the power piston and the plunger, considerable amounts of energy can be produced.

•

Solar Water Heater Plans

Large, well detailed shop prints for a flat-plate collector hot water heater system. Two versions: one for all climates and one for non-freezing climates only. They work well; I've taken highly satisfying showers in water heated by this very heater. Also included is a plan for recapturing heat lost by hot water going down drain.

—JB

Solar Water Heater Plans
$5.00

from:
Zomeworks Corp.
P.O. Box 712
Albuquerque, NM 87103

You should have a means to supplement the solar water during cloudy weather or at times of great use, but it is much more fun to turn this means on and off manually so that you know when you are and when you are not using straight solar water. Your morning shower reminds you of yesterday's weather as you find how much cold you have to mix, or whether you have to mix at all. The question asked of someone getting out of a solar shower is, "Did you have to mix?"

Solar hot water gets you cleaner, makes you happier, rests your bones, cures impotence. If you don't believe it, ask someone who uses it.

Solar Garbage Grinder

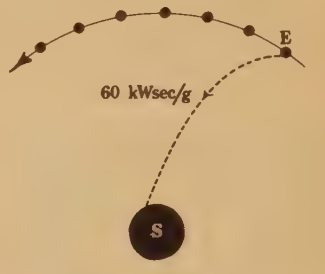
Here are three figures:

1. The amount of energy extracted from burning one gram of carbon:
   CarbonBurning: 34 kWsex/gram
2. The amount of energy extracted from one gram of Uranium in a fission reactor:
   Uranium Fission: $75 \cdot 10^6$ kWsex/gram
3. The amount of energy necessary to lift one gram of matter out of the earth's gravitational pull and to inject it into an orbit that intercepts the sun:
   Solar Injection: 60 kWsex/gram

CONSEQUENCES

While twice the energy obtained from burning any amount of coal is necessary to send it to the sun, only one millionth of the energy obtained from burning a nuclear fuel is necessary to dump the radio-active waste into the sun whose high temperature ($>10^6$ Degrees Kelvin) reduces matter to its primordial form, the elementary particles.

[Sent by Heinz Von Foerster]



Hot Water

A better than average booklet outlining the basics of making hot water heaters that work from solar power or collector coils in chimneys, or both. (Pay attention to what they say about safety valves.)

—JB

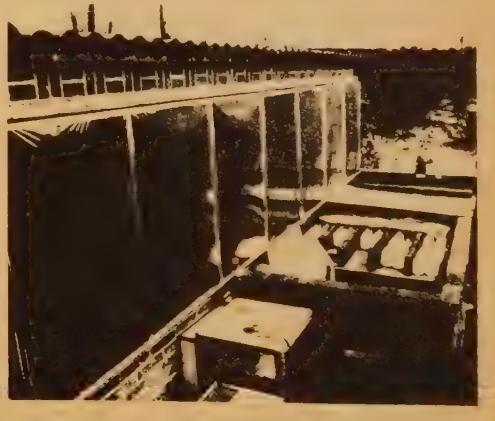
Hot Water
(Solar Water Heaters &
Stack Coil Heating Systems)
Scott & Chole Morgen
David & Susan Taylor
1974; 24pp.
$2.00 postpaid
from:
Hot Water
350 E. Mountain Dr.
Santa Barbara, CA 93108

Solar Energy Warm Air House Heater

Discussion and plans for a rather crude collector system. Not very well detailed, especially if a permanent, durable installation is desired, but the basic idea is fine.

—JB

Solar Energy
(Warm Air House Heater)
A.B. Meinel &
W.B. Meinel
1974; 20pp.
$5.00 postpaid
Helio Assoc. Inc.
8230 E. Broadway
Tucson, AZ 85710



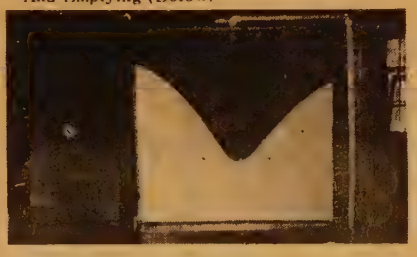
Beadwall (Patent Applied for)

There has been a real need for a way to let in sunlight while it's shining, and then insulate the window to hold the heat. David Harrison has come up with the Beadwall. Tiny styrofoam pellets are blown into the space between two layers of glazing to insulate it, and sucked out when you want to admit solar radiation. He worked with Steve Baer and Zomeworks until the idea was developed enough to be practical. It works! It's strikingly beautiful too, as it fills and empties. The possibilities opened by the Beadwall are interesting, particularly for greenhouses. Plans show system basics, recommend components, specify sizes and materials and offer considerable detail. A license to make one is included.

—JB

Photo Show The Beadwall Filling

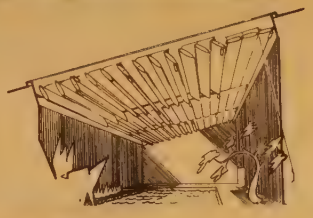
And Emptying (Below)

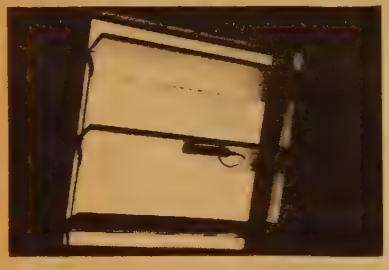


Skylids

Skylids are insulated panels that automatically swivel to block or admit sunlight as required. They do this silently and without using any external power source. They're very well worked out, and downright elegant. Zomeworks makes them in a variety of sizes and will also custom make systems. Skylids are one of the most sophisticated and highly developed solar hardware ideas I've seen.

—JB





Photos Show The Skylid Open And Closed

© 1973 by Steve Baer

Drumwall

Steve Baer's now-famous heat storage wall fashioned from 55 gallon drums. One end of the drums face south and catch solar heat. At night or during no-sun, large doors cover and insulate the weather side. The other end of the drums radiate stored heat into the room. Simple, cheap, and effective. Plans show considerable detail, and include systems incorporating Beadwall and Skylids instead of the doors. (Plans for doors are included too, however). There is also a discussion of the economics involved.

—JB

Hidden drums with Skylid insulation. Air goes in and out through the same vent.

Old 55 gallon oil barrels filled with water, painted black, absorb heat from sun during day. In the evening side panels (seen laying on ground) are drawn shut. Barrels give off warmth all night long heating most of house.

Inside of Steve Baer's house (in Corrales) showing the white side of oil barrels.

Beadwall Plans and License $15.00 postpaid

Skylids $180 - $340 (FOB Albuquerque, NM) (Custom designs quoted)

Drumwall plans $5.00 postpaid

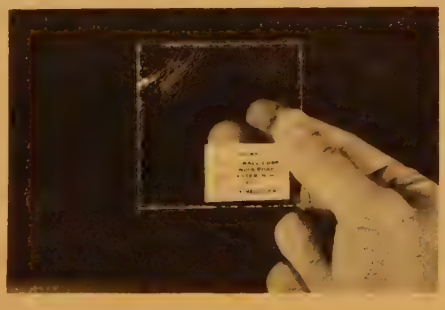
from Zomeworks Corporation P.O. Box 712 Albuquerque, NM 87103

Sun-Lite Fiberglass Solar Collector Covers

"Unbreakable" plastic suitable for solar collector glazing. Claimed to have transmittance properties similar to glass. $ .35 - $ .42/ft² price not bad, especially considering break resistance and light weight. Comes in rolls. Easily cut. Life "estimated" at 20 years, but may well be less in many locations. Expands & contracts more than glass. This stuff would be my choice for many applications.

—JB

Catalog
from:
Kalwall Corp.
1111 Candia Rd.
Manchester, NH 03105

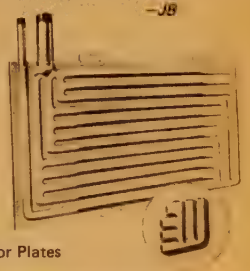


Tranter Platecoil

A number of companies are manufacturing tube-in-sheet and other types of heat exchangers suitable for use as solar collectors. Tranter, Inc., is one, and they make some panels that are especially intended for this use, called Econocoil. Their catalog is an education in itself, as it contains all the formulas you need for calculating heat transfer and pressure drops. The panels are of very high quality and not especially cheap, but they are also very efficient and easy to handle. Outfits such as Tranter aren't really set up to service a deluge of casual requests, so I'd suggest a local rep. If you must send for the catalog, I'd send a dollar.

—JB

Tranter, Inc.
Platecoil Division
735 Hazel St.
Lansing, MI 48909



Econocoil Solar Water Heater Collector Plates

A highly efficient flat plate solar collector, having about 90% internally wetted surfaces.

General Specifications:
1. Allowable operating pressure: up to 75 PSIG
2. Thickness: approx 22 ga. = approx. .029"
3. Material: carbon steel or stainless steel
4. Weight: approx. 55 lbs. for 2' x 10' size
5. Finish: supplied as welded with paint to be applied by others
6. Pressure drop: usually less than 5 PSI for usual low flow rates in this service.
7. Carbon steel is generally considered suitable for closed recirculating systems using glycol or treated water
8. Stainless steel is ideal for swimming pool water and for once through systems such as heating tap water

Varishade Condensation Control

A coating for glass or plastic that reflects sun when dry, and lets it through when wet. Automatic greenhouse sun control!

Another coating, "Sun Clear," prevents fogging of transparent surfaces from condensation.

These look very worthwhile to me. I'm getting some.

—JB

Varishade and Sun Clear Catalog

from:
Solar Sunstill, Inc.
15 Blueberry Ridge Rd.
Setauket, NY 11733

SOLAR ELECTRICITY

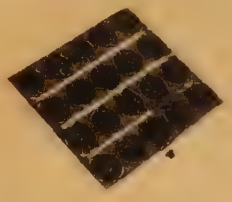
Solar cells are a very expensive way to make electricity, especially in large amounts. But sometimes it's the only way to assure a small, steady supply, as, for instance, to keep a radio or mini-calculator battery charged in the bush country. You can pretty much forget powering a household or a vehicle this way, though it is rumored that cheaper cells will be with us soon. We'd appreciate hearing from people who use them.

—JB

We've heard that the Solar Power Corporation products are excellent.

[Suggested by Bruce Kelly]

$33.00 and up, depending upon your requirements
Catalog
from:
Solar Power Corporation
186 Forbes Rd.
Braintree, MA 02184

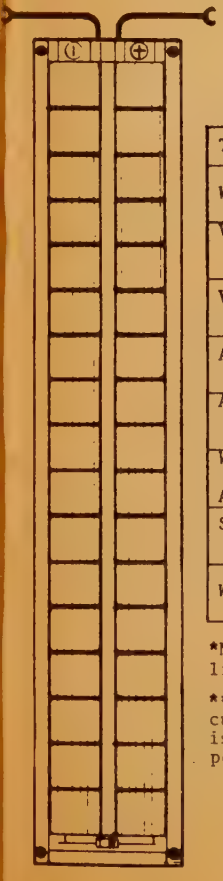


SPECIFICATIONS:		MODEL SBM-4
Power Input:		Solar Insolation
Power Output (under peak solar conditions)*:		
	Volts -	14 V.D.C. Nominal 12 volt
	Current -	300 milliamps
	Power -	3.9 watts
Amp Hours/Week:		12.6 AH
Dimensions: (approx.)	Length -	19 3/8"
	Width -	16"
	Height -	2 3/8"
Weight:		6¼ lbs.
Suggested Retail Price:		$319.00

Prices subject to change without notice

And here's some we've only just heard about. We don't know how good these are.

Solarex Solar Energizer
$75.00 and up,
depending upon requirements
Catalog
from:
Real Gas & Electric Co, Inc.
P.O. Box A
Guerneville, CA 95446



SOLAREX UNIPANEL™

Type	210
Watts (peak)*	1.0 $75.00
Volts (nominal under load in full sun)*	12
Volts (open circuit)*	16
Amps (in full sun at 12V)*	0.08
Ampere Hours approx. (Avg. in 24 hrs.)**	0.34
Watt Hour/week approx. U.S. Avg.(Wash.,D.C.	25
Size (nominal) (inches)	3.5 x 13
Weight	150 gr 0.33lb

*Measured at 100 mW/cm^2 light input.

**The daily integrated current in ampere hours is approximately 4 times peak current in amperes

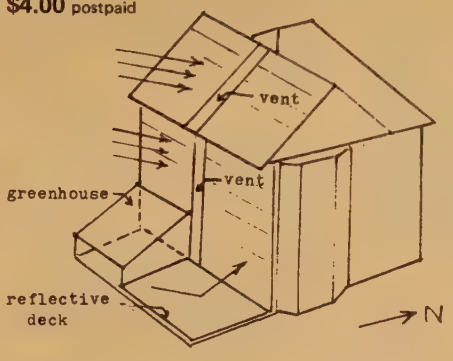
Solar Heated Buildings: A Brief Survey

58 Solar heated buildings are described, and illustrated with small sketch. As these buildings are at various latitudes, you could get some idea of solar collector performance in your area.

—JB

Solar Heated Buildings: A Brief Survey
William A. Shurcliff
1974; 36pp.
$4.00 postpaid

from:
Solar Energy Digest
P.O. Box 17776
San Diego, CA 92117



Ouroboros-East Retrofit House 45° N. 1974. A project of the School of Architecture & Landscape Architecture, Univ. of Minn., Minneapolis, Minn. Project Director: D. R. Holloway. Two-story, 2000-ft^2 house (with basement and attic also), built in 1910 and now made available by HUD, retrofitted in 1974-75 with high-quality insulation and a special water-type solar-heating system to provide ~80% (?) of winter's heat-need. Collector is in two parts: 600 ft^2 on 45° -sloping S roof, and 500 ft^2 on vertical S wall. Total: 1100 ft^2. Water is pumped upward in 1/4-in. space between two sheets of galvanzied steel behind double glazing. Storage system: 2000 gal. steel water tank in basement. Rooms are heated by hot air, via heat exchanger and blower. Operation expected to start by Dec. 1974 or soon thereafter. (Source: misc. pamphlets; also private communication)

Living With the Energy Crisis

A pamphlet giving tips on saving energy around the home. Naive, but has information that may not be obvious to some people.

—JB

Living With the Energy Crisis
(Circular C1.5)
7 pp.
25¢
from:
Small Homes Council
Building Research Council
Univ. of Illinois
1 East St. Mary's Rd.
Champaign, IL 61820

Metric Conversion Tables and Factors

There are several small cardboard "sliderules" and certain mini-calculators that will convert the more common units of measure to and from Metric, but this booklet converts just about everything: Joules, BTU, Newtons, Hectobars... all there in neat tables.

—JB

Metric Conversion Tables and Factors
Eds. of Machinery's Handbook
1973; 35pp.
$2.50 postpaid
from:
Industrial Press Inc.
200 Madison Ave.
New York, NY 10016
or Whole Earth

Instruments

With so many people trying out ideas for collectors and other energy producing and saving devices, it's only a matter of time before the best ideas become obvious. If experimenters took accurate data and kept records, it would help us all see what's what because we could then compare the performance of various designs. To do that, it's most useful to use accurate instruments, such as "Lab Standard" thermometers so that my 50° F is the same as yours. Look under "Scientific Apparatus and Instruments" in the Yellow Pages. If you know of a company that is especially helpful, let us know.

—JB

Mathew House

Henry Mathew has made a solar heated house in Coos Bay, Oregon, and it works. It collects with flat plates and stores heat in an enormous 8000 gallon water tank that lives under the house. The structure itself is very conventional except that it is thought out thermally more sharply than most houses. Mr. Mathew made most of the equipment himself, and the plans tell you more or less how to do likewise, and how to size the components to give the performance you need. His collector does not use antifreeze, but will not freeze on cold nights. The plans are rather crude and assume you have a brain that works, but you could build a good system from them without having to bone up too much on abstract theory. Looks good.

—JB

Plans of Solar Heat System
$10.00
from:
Henry Mathew
Rt. 3, Box 768
Coos Bay, OR 97420

The volume of the water in the tank increases some 4.12% as the water is heated up. This is taken care of by a cover which floats on the water

Thomason House

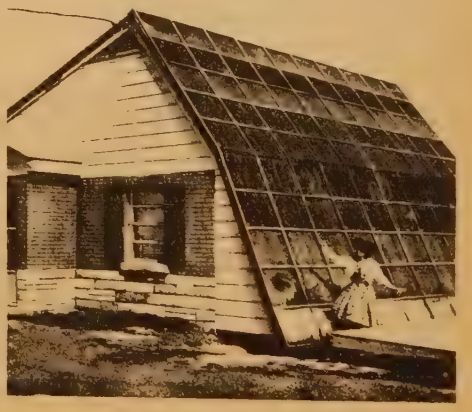
Mr. Thomason has designed and built several working houses, utilizing his idea of running little streams of water down a corrugated black plate that faces the sun. The water thus heated is stored in a large tank surrounded by small stones. Air blown over the stone picks up heat and is used to heat the house during times of no sun. He says the system will work as far north as Boston, but that hasn't been tried yet. His best known house is near Washington D.C., an area not noted for a particularly good climate, so his design is probably sound. Not much attention is given to reducing typical American attitudes and appetites, nor for thermally optimizing the design of the house itself.

—JB

Solar Houses and Solar House Models; No. 9069
1972; 35pp.
$1.00 postpaid

Solar House Plans; No. No. 9440
1972
$10.00

from:
Edmund Scientific Co.
150 Edscorp Bldg.
Barrington, NJ 08007

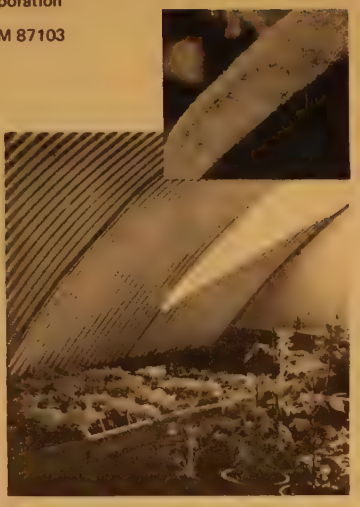


Zomeworks

A company of inventors in Albuquerque, NM, headed by Steve Baer. Highly original practical solar devices and structure systems. Sells hardware, plans, books, zometoys, design & construction, and stock in the company. Hottest item: the skylid, which self-regulates sunshine. (See Pg. 529, 531, 532 and 91).

–SB

Catalog
$1.00
from:
Zomeworks Corporation
Box 712
Albuquerque, NM 87103



Beadwall greenhouse (panels filled)

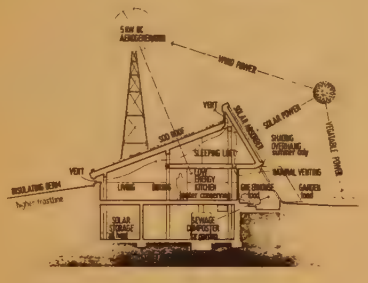
Ouroboros Project

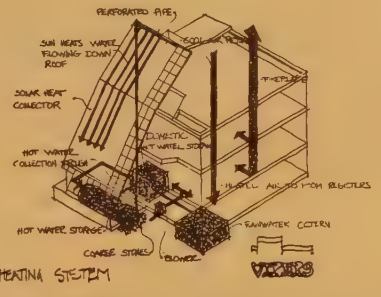
Best school work we've seen. Dennis Holloway at the University of Minnesota has students doing adept design on retro-fitting an old city dwelling for energy efficiency and building a country house of deep independence.

–SB
[Suggested by Day Charoudi]

Ouroboros/East
(Towards an Energy Conserving Urban Dwelling)
1974; 209pp.
$5.50 postpaid

from:
University of Minnesota
School of Architecture &
Landscape Architecture
110 Architecture Bldg.
Minneapolis, MN 55455
Attn: Dennis Holloway





SCHEMATIC: HEATING SYSTEM

RESEARCH COMMUNITIES

We've been led to believe that invention comes either from lone men in their basements or gaudy corporation and university laboratories, and nowhere between. Crash Government funding for energy-relief is being dispensed accordingly. What a waste.

In OUR experience, commune-suspicious as we are, nearly all the best work in alternative energy technology has come from small groups. They generally consist of a few families, a focussing spokesman, a rich assortment of talented multi-specialists (some of whom migrate from group to group), a central office and numerous field projects, and a nourishing network of collaborators, funders, customers, and audience. By some primary commitment to excellence these groups stabilize in a rapid learning mode. Their products are hungry-ingenious and honed fine.

Our favorites are (in order of origin) **Intermediate Technology Development Group, Zomeworks, The New Alchemy Institute,** *and* **Integrated Living Systems.** *Excellent material has come from* **Brace Research Institute** *(See Pg.* **531** *and* **69***); we're unfamiliar with how they work.* **Project Ouroboros** *looks promising.* **Community Technology Inc.** *has a unique commitment to urban application.*

–SB

Low Impact Technology Group

British, organized by economist E.F. Schumacher (author of **Small is Beautiful,** *Pg.* **466***), emphasis on techniques and products for underdeveloped countries (the nearest U.S. equivalent is VITA, Pg.* **68***). Furnishes a marvelous proliferation of goodies.*

–SB
[Suggested by Jim Harding]

Catalog
(of devices)
$1.00 postpaid
from:
Low Impact Technology Ltd.
73 Molesworth St.
Wadebridge, Cornwall
United Kingdom

Order publications from:
I.T. Publications Ltd.
9 King St. (Covent Garden)
London WC2
United Kingdom

INTERMEDIATE TECHNOLOGY PUBLICATIONS

GENERAL

Annual Report of the Intermediate Technology Group, available for 1971 and 1972/73 (charge for postage only)

£0.50 US$1.20

Journal of Appropriate Technology Annual subscription (4 quarterly issues): £3.50, US$8.50

AGRICULTURE

Guide to Hand-operated and Animal-drawn Equipment. Improved tools are an important factor in agricultural development. This illustrated guide lists equipment and manufacturers in U.K. and abroad of a wide range of farming implements. 82 pp. £2.50; US$5.85

Dimensional Drawings or Dimensional Photo-Prints are available for 17 different items of locally constructed agricultural equipment (ox-carts, harrows, cultivators, weeders, etc.). Full list on request. Each. £0.35, US$0.80.

Complete Technical Drawings are available for 7 items of agricultural equipment (list on request), price range from £1.00 to £3.50 each, plus postage. (U.S. $2.40-8.50.)

BUILDING

Information Papers. Set of nine bound reports on building contracting, problems of the construction industry, projects in Nigeria and Kenya (detailed list on request). £19.00, US$45.00.

Teachers Manuals. Set of six "kits", each a book with a two-part illustrated lecture and companion business game or simulation exercises, on: accounting, contracting, estimating, planning, work study, etc. (detailed list on request). Price for the set: £19.00; US$45.00

A Manual on Building Construction. A practical illustrated handbook on construction of small buildings using local materials, suitable for a great variety of ground and climatic conditions. 360 pp. £2.40, US$5.60

CHEMISTRY

Chemicals from Biological Resources. A survey of renewable natural resources which can be converted into useful chemicals by simple processes, with diagrams. 60 pp. £0.55, US$1.30.

INDUSTRY

The Stirling Engine. A comprehensive, illustrated description of this gas combustion engine, followed by an annotated bibliography of 100 references. 32 pp. £1.25, US$3.00.

RURAL HEALTH

Health, Manpower and the Medical Auxiliary. Three articles, 12 case studies and an annotated bibliography of 134 references. 65 pp. £2.00; US$4.75.

Simple Designs for Hospital Equipment. A series of 10 leaflets with constructional drawings and specifications for locally made invalid carriage, bedside table/locker, wheelchair, folding bed, etc. (Full list on request). £0.50, US$1.20

Intermediate Techniques. A booklet of sketches and drawings of specialised hospital furniture and equipment for the physically handicapped, for local construction. 23 pp. £0.50; US$1.20.

RURAL WORKSHOP

How to Make a Metal-bending Machine. A technical specification with plans and drawings, for a hand-operated metal-bending machine with photographs. 24 pp. £1.00; US$2.40.

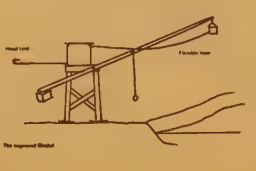
Oil Drum Forge designed for local construction. Full technical specification with plans, drawings and instructions for making a simple forge from an oil drum. 33 pp. £0.90, US$2.15.

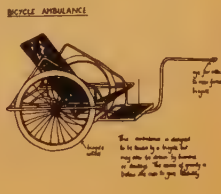
WATER

Water Treatment and Sanitation. Manual of simple methods for water treatment in rural areas of developing countries. Diagrams and illustrations. 60 pp. £1.75, US$4.10

The Introduction of Rainwater Catchment Tanks and Micro-Irrigation to Botswana. Report of a field project, with illustrations. 74pp. £2.00; US$4.75.

lever and transfer basket



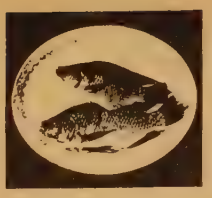


The New Alchemy Institute

Famous for their work in backyard aquaculture at Cape Cod, the Alkies are far the most biological of these research groups. Headed by John Todd, they are ecologically sophisticated scientists committed to fostering self-sufficient local systems. What you may buy from them is participation in their research network ($25/year) which includes a subscription to The Journal of the New Alchemists. *(See Pg.* 540, 538, 537, 488, *and* 474*).*

—SB

The New Alchemy Institute
Box 432
Woods Hole, MA 02543



The Ark

THE ARK: A SOLAR-HEATED AND WIND-POWERED GREENHOUSE AND AQUACULTURE COMPLEX ADAPTED TO NORTHERN CLIMATES.

The complex includes a sunken greenhouse, an attached aquaculture pond, a solar water heater and a diversity of light and heat conservation and distribution components. It is an integrated, self-regulating system requiring the sun, power for water circulation, waste materials and labor to sustain its productivity. The electricity to drive the circulation pump will ultimately be provided by a 6 kilowatt windmill. The heat storage— climate regulation component is a 13,500 gallon aquaculture pond. Solar heat is trapped directly by the covered pond and by water circulating through a solar heater. The attached greenhouse is built below the frost line and derives its heat from the earth, direct sunlight and from the warmed pond water passing through pipes in the growing beds within the structure. Details are provided in the second Journal of The New Alchemists.

The intensive fish farming component is comparable to those already pioneered by the Institute. Several crops of *Tilapia* fish will be cultured throughout the warm months on foods raised within the structure. A single crop of trout and perch will be raised during the cooler seasons. It is our hope that the aquaculture component will be productive enough to underwrite construction and maintenance costs and that the greenhouse component will provide abundant marketable vegetables and greens.

•

FISH PISS: THE LINKING OF AQUACULTURE AND THE RAISING OF VEGETABLE CROPS

In 1970 we performed an interesting laboratory experiment in watering lettuce and parsley plants with enriched water from a densely populated aquarium. A series of plants was grown in flower pots. Half of them were watered with tap water and half with water from a 55 gallon tank containing 8 small catfish. The plants watered from the aquarium grew faster and were visibly larger than those which received tap water.

This year the experiment was repeated outdoors on a larger scale. Leaf lettuce, beets and zucchinis (leaf crop, root crop and vine crop) were the vegetables used. Half of the plants received tap water while the others received water from one of our aquaculture ponds containing about 700 tilapia and a heavy algae bloom. Beets and zucchinis did not respond to the enriched water, but the lettuce was a different story. In three successive experimental trials involving 69 to 98 lettuce plants, the weight of edible lettuce produced in the pond water plots exceeded that from the tap water plots by 44.3%, 67.9% and 121.6%.

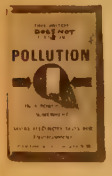
We conclude that vegetable growers having access to fish pond water would be well repaid for the effort of applying such water to shallow rooted leaf crop vegetables, particularly those which, like lettuce, favor abundant moisture and high levels of fertilization. There are other benefits from connecting pond and garden cycles. We found that the tilapia fish avidly consume vegetable crop wastes, especially carrot tops and a variety of weeds from the gardens. The various links create a productive cycle: plants for the fish and man, fertilizer and moisture from the fish ponds for the plants, and the steward gently orchestrating the whole.

Integrated Living Systems

ILS, headed by Bob Reines, is a mountain laboratory complex of domes, wind generators, and solar collectors operating in complete energy isolation. The effort is to develop a total energy-living kit for mass use by autonomous communities. Results so far are impressive. (See also Pg. 526*) No product or publication yet.*

—SB

Integrated Living Systems
Star Route 103
Tijeras, NM 87059



ILS solar collectors, heat storage, and "Windmule"– electric pickup.

Bob Reines, J. Baldwin, and Phil Nelson in ILS windpowered shop.

The ILS Prototype I system uses 20% of the electrical energy and 10% of the thermal energy required in an average house. It is important to mention that all of the electricity, hot water and space heating are provided by the sun and the wind with no back up. During the past winter, the site of the ILS Prototype I experienced 119 inches of snow and more than a week at a time of no sun or wind. Temperatures were down to ten degrees below zero Fahrenheit. The energy systems of the Prototype functioned normally.

A prototype like ILS I would have cost industry about $500,000.00. The capital outlay for Prototype I was about $12,000.00 and two man-years. Our monetary efficiency demands much research and development at reduced costs.

ILS Labs is a laboratory. It in itself is an experiment. We are not a business but a team of ten people who design, construct, and live in systems which can ultimately be brought into society by other impact groups. Our goal is to build a larger laboratory with some two hundred scientists, engineers, designers, lawyers, doctors, artists, anthropologists, communications people and the like, working together in a new way with a sense of urgency to provide new tools, models and methodologies to grapple with the broad problems of energy, people and habitat. We have the hardware to build a very inexpensive physical plant for the laboratory in a very short period of time. The ILS system hardware allows for the first time energy autonomous communities to be built. Many national laboratories have been created to respond to urgent national problems. It is time to build a laboratory which responds to the urgent problems of energy and appeals in its physical form and objectives to kindle the imagination of the ILS staff as well as the American public.

Community Technology, Inc.

Karl Hess, always introduced as the-radical-who-used-to-write-speeches-for-Barry-Goldwater, has spent several years immersed in the Adams-Morgan neighborhood of Washington DC exploring uses of soft technology for neighborhood autonomy and self-organization. Works in cahoots with the Institute for Self-Reliance and Communitas. Inspirational literature available (send $1 and stamped self-addressed envelope).

—SB

Community Technology, Inc.
1520 New Hampshire Ave. NW
Washington, DC 20036

Here are some of the things that could be done right here in Adams-Morgan:

High intensity production of food fish in neighborhood basements. (We've already demonstrated how you can raise up to ten tons of fish per year in a single basement.)

Alternative sources of energy such as solar heating and cooking, wind energy, methanol.

New transportation systems, such as locally built electric cars, locally built bikes, electric shopping carts, pedal-cars, and anything else that can make Adams-Morgan more self-reliant and a better place to live.

Hydroponic gardens and greenhouses in which high yields of vegetables can be produced year-round from plants growing directly in nutrient solutions.

Street and alley gardens, to make use of all available space to increase the food quality and quantity available in the neighborhood.

Waste disposal systems to produce fertilizer and energy instead of pollution.

Projects to reclaim discarded materials, redesign obsolete things, make sure that nothing goes to waste when so many need so much.

Communications: Alternative technologies ranging from better ways to put up posters to neighborhood-wide broadcasting— extensions, in a way, of the good things that the Video Center does.

Tool inventory: What tools and skills do we have in Adams-Morgan? We'll try to find out— with your help— and then maybe we can develop a cooperative way to use those tools and skills for the benefit of the neighborhood and thus become a little smarter, a little more self-reliant.

Manufacturing: What sort of local productive facilities can we have here; What do you think? And couldn't we do a better job of sharing work and sharing production than the profit-hungry big corporations?

Karl Hess

The French-built Aerowatt, distributed by Pennwalt Corp.

WIND POWER

Dependable wind-generated electricity in useful amounts is not easy to come by. The dream of a simple machine whirring away on the roof of a log cabin in the wilderness, with people inside enjoying modern conveniences turns out to be elusive. Commercially available machines large enough to provide power for business-as-usual in a home are very expensive. Rebuilding a suitable antique machine often takes more money than predicted by the time you get it up on a tower and provide the batteries and controls. Most homebuilt machines have been capable of only low output and have been subject to maddening breakdowns. The biggest problems are money and reliability. Weather tends to be more powerful than most people think. We know of at least one installation of an expensive imported unit that blew completely away in a mountain storm. Ice, dust, corrosion, hailstones, insects, lightning, bullets, maintenance, metal fatigue, and very high wind forces are all problems that must be faced if wind machines are to be practical.

Because of the high costs of making and testing prototypes, some of the more dramatic work is being done by large companies who have the staff and facilities. One of the reasons for the high cost of existing machines is the low production rate. If these corporations come up with good designs and mass produce them, we'll see a cost decline. But it's doubtful that wind power will ever be cheap. Spreading the costs over a community is one way to reduce the bite.

—JB

Electric Power From the Wind

Electric Power from the Wind *answers most of the beginner's questions about wind power so he won't have to bother anyone unless he wants to* really *get into it.*

—JB

Electric Power From the Wind
Henry Clews
1973; 29pp.
$2.00 postpaid

from:
Solar Wind Co.
P.O. Box 7
East Holden, ME 04429

Our batteries are "Century House Lighting" batteries made by the Century Storage Battery Co., Ltd. in Australia and distributed through Quirk's. They come in completely transparent polystyrene cases and have built in "gravity ball" indicators which tell you at a glance their state of charge. In our house, they are mounted in a long row under a bench which can be folded up to inspect them. So far they have required no attention whatever. Quirk's claims that the average life of these batteries used in this application is 15 to 20 years.

•

In our main fuse box we have 15 Amp fuses, so I guess if you want to compare our wind electric system to the Power Company service, you could say we have a 15 Amp service. But since the tools are used during the day and the lights at night, we've had no problem with overloads as yet. We estimate that with our system, which has been in operation since August 15, 1972, that we are getting about 110 Kilowatt-hours of electrical energy per month. This is on the order of one fourth the amount of power that the average American family consumes from the Power Company.

Wind Energy Bibliography

A comprehensive bibliography of information you can use to design wind powered devices and systems. Includes theory, design, aerodynamics, tower design, storage systems etc. Nicely done.

—JB

Wind Energy Bibliography
1973; 65pp.
$3.00 postpaid

from:
Windworks
Box 329 Rt. 3
Mukwonago, WI 53149
or Whole Earth

Wind and Windspinners

By golly, somebody at last has done a good job of spelling out what is involved in making a wind electric system yourself. The design is for the well-known Savonius Rotor ("S" rotor), which is not a particularly efficient type, but is easy to build. The author is honest about it all, and gives a commendab amount of numbers and tables necessary to figure out expected performance for this and other machin He also discusses the toughest riddle of the S rotor: how to get it up on a tower where the wind is and yet keep things simple. Altogether it seems to be very complete information and you could actually make a workable machine from these instructions.

—JB

The wind (this is A.T. wind energy) can only transfer 12 percent of its energy to the S-rotor. After transfer thru the gearing to the alternator, only 10.8% of the original is left. The alternator takes this mechanical energy and transforms it into electricity, and only 5.4% is still in usable form (as electricity). Trundle this electricity down the wires to the eagerly waiting batteries. . . only 4.86% of the origina energy arrives to be stored. Then when this electric energy pulled out and used, we find that all but 3.89% has disappeared! We scoot this off thru wires, hoping we won't lose much more, (but we lose 40% along the way) finding

Power From the Wind

The story of the development, testing and failure of the huge wind generator at Grandpa's Knob, Vermont, in the 1940's by the designer himself. While obviously not everyone's interested, this story will fascinate those who are seriously into wind power. In addition to being a documen account of a real project, Mr. Putnam provides many charts and a lot of data to support his design decisions. He uses th data to make a proposal for future machines that would no fail. There is a great deal of attention paid to characteristics of wind, and how to determine a good site for a generator.

If you've never read a book documenting a project, this is a good one to read. Not only is the subject interesting, but the book clearly shows how engineers work, what their problems are, and how they go about solving them. It also

ANNOTATED WIND ENERGY BIBLIOGRAPHY

by Windworks

Box 329 Route 3
Mukwonago, WI
53149
414-363-4408

15 June 1974

The Winds
(The Origins and Behavior of Atmospheric Motion)
George Hidy
Van Nostrand Co.
1967; 174pp. $3.95

Simple principles of physics are used to explain the features of atmospheric motion. The book is primarily concerned with airflow below 35,000 feet, but the upper atmosphere is mentioned briefly. Drawings, graphs, and equations are used to illustrate the principles of fluid dynamics involved. It is technical in nature and, while not required reading for the home builder, can be of great value in understanding how and why the winds behave as they do. The address of the publisher: D. Van Nostrand Co., 300 Pike St., Cincinnati, OH 45202.

Climatic Atlas of the United States
U.S. Department of Commerce
1968; 80pp. $4.25

This is a complete source of climatalogical information for the United States. Besides information on precipitation, temperature and sunshine it includes the following wind information: monthly and annual prevailing direction, fastest wind, surface wind roses, annual percentage frequencies and annual mean wind speed. This data is collected by approximately 150 reporting stations across the U.S. The Department of Commerce also offers a monthly report for each state. It costs $2.40 per year or $.20 per month. Either of these is available from: Environmental Data Service, National Climatic Center, Federal Building, Asheville, North Carolina 28801.

Windmills and Watermills (See pg. 69)
John Reynolds
Praeger Publishers
1970; 196pp. $12.50

This survey of man's earliest machines is well illustrated with detailed photographs and drawings. It is accompanied by a comprehensive text that follows millwrights and their mills through succeeding generations of development. It's not oriented towards the 'how-to' but how it was done. The book shows a healthy respect for the men and their machines.

Publishers address: Praeger Publishers, P.O. Box 1323, Springfield, MA 01101

Is There a Place for the Windmill in the Less Developed Countries
Marshel Merriam
Technology and Development Institute
Working Paper Series No. 20
1972; 36pp.

This is a study of the state of the art of windmills in respect to the less developed countries. It is not technical in nature, but covers the components involved in a wind energy system. It is written in an easy to understand manner, with chapters on appropriate uses for windmill output, selection of a type of windmill, will the wind be sufficient, and economics in a LDC context. There are useful appendicies on windmill manufacturers and the characteristics of available windmills. It serves as a basic introduction to the utilization of wind power. The publisher's address: Technology and Development Institute, The East-West Center, Honolulu Hawaii 96822.

Electric Power From the Wind
Henry Clews
Solar Wind Publication
1973; 29pp. $2.00

This is a basic publication dealing with domestic scale wind electric plants. Henry Clews is the U.S. distributor for the Swiss made Elektro and the Australian Dunlite wind generators, and much of the information in the booklet is based on his experience gained powering his homewith wind generator power. It is an introduction to the subject, non-technical in nature, and he'll include price lists of the commercial units he offers. A revised version of the booklet will be available in the Fall. Write: Solar Wind PO Box 7, East Holden, Maine 04429.

Proceedings of the United Nations Conference on New Sources of Energy
Rome 21-31 August 1961
Volume 7, Wind Power
1964; 408pp. out of print

This is the most complete technical reference on the use of wind power. Because it is a publication of papers presented at a conference it lacks the continuity of a book, but those who attended the conference were active in various aspects of wind energy so much of the information is based on experience. The papers are divided into three subject areas: Studies of wind behavior and investigations of suitable sites for wind driven plants (177 pages), The design and testing of wind powered plants (125 pages), and recent developments and potential in wind power utilization (101 pages). The papers present experience gained in the operation of wind generators ranging from 2 to 100 kw, and includes information not available any where else, as in the case of "The Aerodynamic Layout of Wing Blades of Wind Turbines with High Tip Speed Ratios" by Hutter. Summarys for all the papers are also given in French. Although this volume and the companion volumes on geothermal and solar energy are out of print, there are plans to reprint them. For information write: United Nations Publications LX 2300 New York, New York 10017.

The Generation of Electricity by Wind Power
E.W. Golding
Philosophical Library (US publisher)
1965; 318pp. out of print

Golding, who was active in the design and testing of English-built wind generators during the 1950's, collected much of the information that was available at that time. The result is an extensive treatment of the history and types of windmills, wind characteristics and large-scale wind power installations. The area most extensively treated is wind, with chapters on the energy obtainable, wind characteristics and distribution, wind power sites, and wind measurements. It offers a good balance between technical and non-technical information, and includes an extensive bibliography. The publisher is considering republishing, their address is: The Philosophical Library, 15 East 40th Street, New York, New York.

Windmills
E.N. Fales
in
Standard Handbook for Mechanical Engineers, 7th ed.
Baumeister & Marks
McGraw-Hill
1958; pp9-8 to 9-13 $31.00

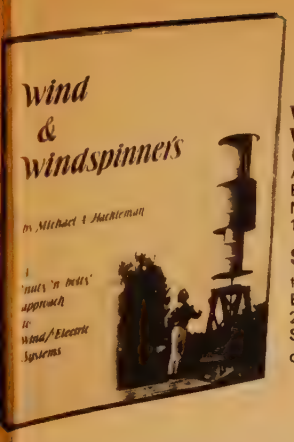
These five pages offer a complete introduction to the design and operation of windmills. There are a number of simple equations dealing with the power available, axial thrust, tip speed ratio, and forces acting on the blades. Also dealt with is the difference between basic windmill designs and wind characteristics relating to wind generators. This is only a small section of a book that offers a wealth of technical information, many times worth the price. The publishers address: McGraw-Hill Book Co., Princeton Road, Highstown New Jersey 08520.

Wind Power for Remote Microwave Stations
Ulrich Hutter
Automatic Power
1959 (aprox.) 16pp.

This small informative paper puts Dr. Hutter's aerodynamic concepts and experience in an easily understood format. Th subjects dealt with include wind behavior, tip speed ratios, matching the power output to the load, and a description o Hutters own design, the WE-10. The WE-10 was a 10 meter, 10kw wind generator that was in production from 1950-1960 and distributed in the United States by Automatic Power Inc., 205 Hutcheson Street, Houston Texas 77003.

Theory of Wing Sections
Including a Summary of Airfoil Data
Ira Abbot and Albert von Doenhoff
Dover Publications
1959; 683pp. $4.00

This is the standard reference on airfoil design. It includes



Wind and Windspinners
(A 'nuts 'n bolts' Approach to Wind/Electric Systems)
Michael A. Hackleman
1974; 115pp.

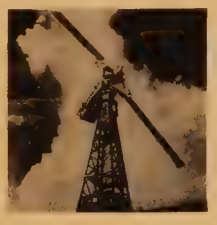
$7.50 postpaid
from:
Earthmind
26510 Josel Dr.
Saugus, CA 91350
or Whole Earth

only 2.33% of the original amount of energy left to light the light bulb. Somewhat discouraged, we switch on the light and— to our dismay— only about 0.233% of the (A.T.) energy which was in the wind survives to illuminate the page we read.

If we consider that this is more like 0.388% of the energy we could extract if our rotor was 100% (of T.M.) efficient, we might feel somewhat better, but I doubt it.

makes obvious that extracting large amounts of power from the wind is going to take work and will not be an easy matter. The book is written in a personal, rather dry style, but certainly readable if you're serious.

—JB



Power From the Wind
Palmer Cosslett Putnam
1948; 224pp.
$9.95 postpaid
from:
Van Nostrand-Reinhold Co.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

Windmill Manufacturers

A list of all makers of windmills for both electricity production and water pumping. Also some researchers and marketers.

—JB

Windmill Manufacturers
Gerry E. Smith
Revised 1974; 7 pages
$1.00 postpaid

from:
University of Cambridge
Department of Architecture
Technical Research Division
1 Scroop Terrace
Cambridge CB2 1PX
England

Windmill Towers

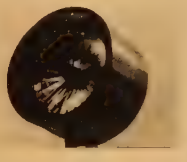
Windworks has an octehedral tower design proven up to 42 feet, which is about minimum height for catching wind (except at very exposed locations). This tower uses relatively inexpensive thin wall pipe, and uses very little of it at that. As the price of metal rises, towers get to be an increasingly large proportion of the cost of a wind machine system. This looks like one good answer. I don't know if they sell plans separately, but I bet they would.

—JB

Wind Dynamo

Willard D. Gillette has built an experimental wind machine that runs a rather small rotor inside an aerodynamic shroud containing field coils. There are magnets in the rim of the rotor. He thus achieves a high rate of relative motion between the two without having to resort to gears, brushes, or enormous blades. The machine is thus lighter and more efficient than others, and requires less material. Speed is governed by turning on more field coils as the wind picks up, thus giving the dynamo more work to do, hence keeping down the speed of the rotor. Smart! Professionals (only, please) may discuss things with him by writing. The rest of us will have to wait and see.

—JB



Willard D. Gillette
P.O. Box 241
Brunswick
ME 04011

Princeton Sailwing

The Princeton Windmill Program has developed a sailwing wind turbine suitable for generating electricity, and recently licensed it to an aircraft company for development. Information is available:

A booklet "The Princeton Windmill Program" is $1.00
from:
Forrestal Campus Library
Princeton University
Princeton, NJ 08540

Information regarding possible purchase of a machine should be sent to:
Mr. William Carl
Grumman Aircraft Corp.
Plant 30/Department 300
Bethpage
Long Island, NY 11714

Plans for the machine are being prepared (no price yet). Write:
Flanagan's Plans
2032 23rd St.
Astoria, NY 11105

Sailwing Windmill Plans

If a sailwing windmill intrigues you, these plans might be a good place to begin. They do best in low winds and may have durability problems in weather extremes. The sails are manually reefed for winds above 20 mph. The octahedral tower design seems to be a good way to go, as it uses far less steel than other designs. As with other plans, the small details are left to the builder, and some of these can be critical.

—JB

Plans for 25 foot diameter sail windmill (with tower)

Sailwing Plans
$25.00

from:
Windworks
Box 329 Rt. 3
Mukwonago, WI 53149

The New Alchemists have also made an operating sailwing water pumping windmill. (See **Journal of The New Alchemists No. 1;** *Page* **538).**

the aerodynamic characteristics, description of airfoil geometry and associated theory for the NACA wing sections that continue to be the ones most commonly used for aircraft, helicopter rotor blades, propeller blades, and fans. Sample chapter titles are; the significance of wing-section characteristics, theory of thin wing sections, the effects of viscosity, basic thickness forms, and airfoil ordinates. The publisher states "Mathematics has been kept to a minimum, but it assumed that the reader has a knowledge of differential and integral calculus and elementary mechanics." The publisher's address: Dover Publications, 180 Varick Street, New York, New York 10014.

TECHNICAL REPORTS
on
High Speed Vertical Axis
"egg beater" design

This design is currently being studied at the National Research Council of Canada by Peter South and Raj Ranji. The design has attracted much interest because of its interesting configuration and potentially low cost. It is still in the research stage, and South and Ranji have prepared a number of technical reports that describe their experiments. These reports are: Preliminary Tests of a High Speed Vertical Axis Windmill Model (LTR-LA-74), A Wind Tunnel Investigation of a 14 ft. Diameter Vertical Axis Windmill (LTR-LA-105), and the Performance and Economics of the Vertical Axis Wind Turbine Developed at the National Research Council (PNW-73-303). These are available from the National Research Council of Canada, Ottawa Canada.

CONSTRUCTION PLANS

Construction plans are available from a number of different groups. The complexity of the plans is a function of the nature of the windmill. The plans prepared by Brace Research and Volunteers in technical Assistance are meant for use in the less developed countries, therefore they stress rugged construction and low cost, usually at the expense of efficiency. The plans developed by Sencenbaugh and Windworks for the home builder in industrialized countries, are more complex. Below is a list of the plans that we are aware of and where you can order them.

Vertical Axis-Savonious Rotor split oil drum configuration

Brace Research Institute
MacDonald College McGill University
Ste. Anne de Bellevue 800
Quebec, Canada
Do-it Yourself Leaflet No.5
$1.00

Volunteers in Technical Assistance
VITA
3706 Rhode Island Ave.
Mount Rainier, Md. 20822
plans no. 11132.1
$.75

Earthmind
26510 Josel Dr.
Saugus, Ca. 91350

Horizontal Axis Multi-blade Fan Type

VITA
(See address above)
plans nos. 11133.1 and 11133.3
$1.00 each

Horizontal Axis Sail Type

VITA
plans No. 11131.1

Windworks
Box 329 Route 3
Mukwonago, WI 53149

Horizontal Axis High-speed Propeller Type

Jim Sencenbaugh
678 Chimalus Drive
Palo Alto, Ca. 94306
$12.00

Windworks
(see address above)
$15.00

ASSOCIATIONS

Experimental Aircraft Association
PO Box 229
Hales Corners, Wisconsin 53130

This association is operated for people designing, building and flying their own aircraft. They have a monthly publication, Sport Aviation, with regular features on education through error, the design and construction of 'home-builts'. It is full of information, structural and aeronautical, that people trust their lives to. The EAA also offers a number of publications on airplane construction, for example; Wood vols. 1 and 2, $2.50 each, Tips on fatigue $2.50, and Design 3 vols. $2.00 each. A subscription to Sport Aviation is included in the annual membership rate of $15.00.

Soaring Society of America
PO Box 66071
Los Angeles, Ca. 90066

The SSA is an association geared to motorless flight-soaring and hang gliding. The monthly publication, Soaring, has information on aerodynamics, construction techniques, and materials on an irregular basis. The $15.00 annual dues includes a subscription to Soaring, contents of the OSTIV (Organisation Scientifique et Technique du vol a Voile) publication, information on "Technical Soaring" and motorless flight conferences. These are all exceptional sources of technical low speed aeronautical information.

WIND GENERATOR DEALERS

A number of companies now distribute wind machines and other energy hardware. Most of them carry more or less the same goods, as there are not many manufacturers. None of the manufacturers could really be called high-production, and it might be a good idea to remember that foreign made machines have the possibility of the same sort of parts and information hassles that one finds with low production foreign cars; problems which can be caused by conditions beyond their control, such as dock strikes. Moreover, there are not many machines up and working yet in this country, so there is not a large body of hard experience. You'll be a sort of pioneer if you buy one. Dealers are multiplying rapidly. (All catalogs $1.00).

—JB

Solar Wind Co.
R.F.D. 2
East Holden, ME
04429

Agents for Dunlite (that's Quirk's) of Australia; Elektro of Switzerland; Dyna Technology of USA (a small unit only); Sencenbaugh, USA (Plans only)

Sencenbaugh Electric
P.O. Box 11174
Palo Alto, CA 94306

Sencenbaugh carries their own plans, Dunlite, and Elektro.
[Suggested by JD Smith]

Pennwalt Corp.
Automatic Power Div.
P.O. Box 18738
Houston, TX 77023

Distributes Aerowatt from France. Very good, expensive machines.

Real Gas & Electric Co., Inc.
P.O. Box A
Guerneville, CA 95446
and
Environmental Energies, Inc.
11350 Schaefer
Detroit, MI 48227

Quirk's, Dyna Technology and Elektro as well as batteries and other related equipment. They also stock Solerator collectors and Solarex solar cells.
[Suggested by Tom Bender]

Independent Power Developers
P.O. Box 618
Noxon, MT 59853

Agency for Dunlite, Elektro, Dyna Technology, and a variety of water turbines and rams.
[Suggested by Terry Lawhead]

Lubing Maschinenfabrik
Ludwig Bening
2847 Barnstorf
P.O.B. 110
Germany (West)

Manufacture the Lubing Water water pumping and electricity producing windmills which are highly regarded in Europe.

SOFT TECHNOLOGY

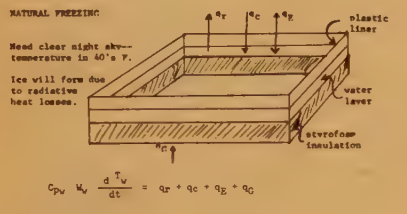
Alternative Sources of Energy

A well established newsletter covering energy matters from the standpoint of encouraging individual action and experimentation. ASE is striving to develop an information network among its readers, and they are apparently having some success. There has been a slow but sure tightening of standards as readers and editors alike have co-informed one another towards more perfected hardware. This has led to a commendable reduction of ill-informed fantasy and an equally commendable rise in the quality and usefulness of the schemes presented.

Issue No. 9 is a comprehensive bibliography of energy subjects.

—JB

Alternative Sources of Energy
$5.00/yr, 6 issues
(They run about 60pp)
Back issue No. 9 75¢
from:
Alternative Sources of Energy
Route 2 Box 90-A
Milaca, MN 56353



$$C_{P_W} M_W \frac{d T_W}{dt} = q_r + q_c + q_E + q_G$$

M_W = Mass water
C_{P_W} = Specific heat of water
T_W = Water temperature
q_c = Heat gain - convection from air
q_G = Heat gain-conduction
q_r = Radiative heat loss
q_E = Gain due to evaporation or condensation, or heat loss

Natural processes for cooling and freezing water when air temperatures are above freezing have been used for centuries in Persia, India, Egypt and other locations. These processes rely on radiation and evaporation to cool the water. These processes have been discussed by Harold Hay, Gar Smith, Harry Thomason, and others (see references). This natural freezing process would be an excellent method for producing ice for refrigeration in any location which has low humidity and clear skies. Thus in the desert or in the mountains you can get ice without external energy sources and without a complicated apparatus with moving parts.

In The Making

A small new publication from England, very clear-minded, most useful in the U.K., but of interest to anyone involved in economic and life-style alternatives. General orientation is toward projects which are trying to get off the ground, and which involve self-management, worker-initiation, cooperative ownership and control, and/or alternative technology.

The self-described proposed projects vary from a small shoe-making shop, and a furniture factory, to a "community access" computer center. Remarkable range of projects and the inspiration that comes from reading about what people are doing to change their working lives. There's a Profiles section where people who are looking for work on such projects present themselves and their skills. A good service, since a number of the projects state their need for people. Lots of helpful tidbits about setting up non-capitalistic capitalistic businesses, and the problems thereof.

—Diana Barich
[Suggested by Chuck Missar]

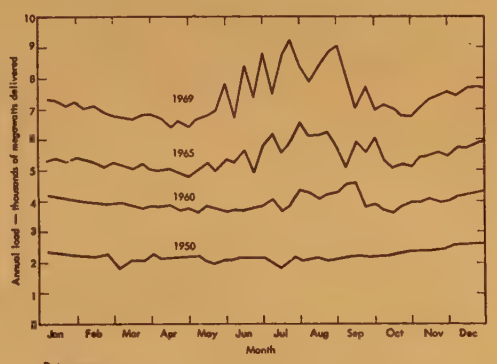
In the Making
(A Directory of Proposed Productive Projects in Self-Management or Radical Technology)
1974; 33pp.
$1.15 /yr
$ .35 /issue
$ .23 /copy. 15 or more
from:
ITM
71 Thirwell Rd.
Sheffield S8 9TF
York, England

Energy: Uses, Sources, Issues

Though many of the information sources quoted represent the vested interests of the several energy industries, a look between the lines is nonetheless horrifying. "Most of the coal reserves are below depths that can be recovered by conventional methods." (1000 ft.). Howard Odum's contention (Pg. 469) that the amount of energy that it takes to get the fuel will begin to approach the energy value of the fuel extracted appears to be coming true. The information is in the form of clear graphs and abstracts so it's easy to read. Another good source book for earth defenders.

—JB
[Suggested by Jim Harding]

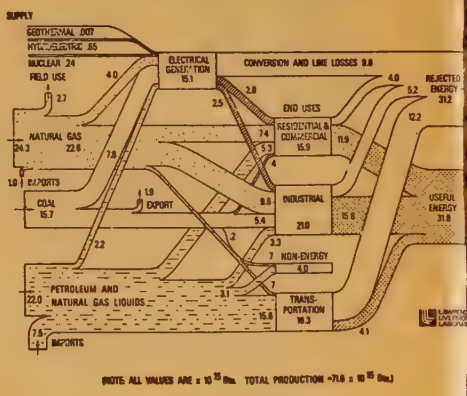
TYPICAL LOAD CURVES FOR A MIDWESTERN UTILITY



Data source:
"Potential Nuclear Power Growth Patterns"
Report WASH-1098
System Analysis Task Force
Division of Reactor Development and Technology
U.S. Atomic Energy Commission, Washington, D.C.
December, 1970

Energy: Uses, Sources, Issues
A. L. Austin, et al
1972; 156pp.
$3.00 (they'll bill you)
from:
NTIS (National Technical Info. Service)
U.S. Dept. of Commerce
5285 Port Royal Rd.
Springfield, VA 22151

U. S. ENERGY FLOW PATTERNS, 1970



CHARACTERISTICS OF FORECASTING ENERGY CONSUMPTION

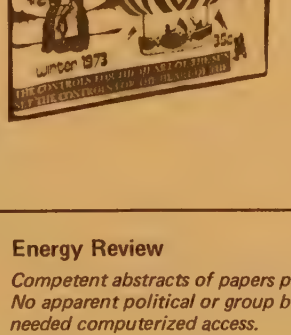
Estimates vary widely.
All past projections predicted less energy consumption for 1970 than actually consumed (see accompanying chart). National Petroleum Council projection is the latest. They predict a consumption of 125 X 10^{15} BTU in 1985. Will their estimate also be low?

Undercurrents

The magazine of radical science and people's technology.

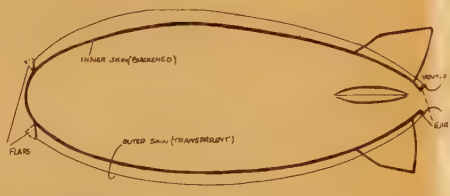
An often irreverent look at some of the facts and follies of technology. Done with more literary style and humor than U.S. counterparts. (Well, actually there is no U.S. counterpart.) Reviews and commentary on a wide range of subjects, including us.

—JB



Undercurrents
$9.20 /yr., 6 issues (airmail)
$4.60 (surface mail)
from:
Undercurrents Partnership
275 Finchley Rd.
London NW3
England

ecodoodlebug



Suggestion number one is a sort of slow-motion doodlebug, rather large scale pulse-jet engine of the sort made famous by the late lamented Adolf. It involves a double skin airship. The inner skin is the normal envelope, blackened, while the outer is a transparent, stretchable light covering. At the front of the ship are vents which can be opened and closed to allow air into the space between the two layers and towards the back are more flaps to allow this air to flow into a venturi at the rear of the ship. The principle of operation is simplicity itself. Initially all flaps are closed and the incident solar energy is absorbed on the blackened inner skin and trapped between the two layers by the greenhouse effect. This heats up the air between the two layers causing an increase in pressure and the outer skin expands to accommodate it. At the right moment the rear flaps are opened and the air rushes out through the venturi, transforming all that lovely pressure energy into propulsive effort. Exactly the same sort of thing happens when you let go a balloon without tying the end. When the air has been expelled the rear flaps are closed and the front opened allowing more air in, and the cycle is repeated.

Energy Review

Competent abstracts of papers pertaining to energy. No apparent political or group bias. Includes much-needed computerized access.

—JB

Energy Review
$45.00/yr bi-monthly
(Sample was 30pp.)
from:
Energy Research Corp.
6 E. Valerio St.
Santa Barbara, CA 93101

ELECTRIC POWER - VEHICLES

OSC ENERGY-INTENSIVENESS OF TRANSPORTATION
MYERS, L. FEB 73 P. 111
TRANS ENGR JNL ARTL

11A FEASIBILITY ELEC. TAXIS BUSES IN N.Y.C.
SEARLE, C 6/20/73 52 P.
N.Y.S. PUB SERV COMM RPT

12B ELECTRIC VEHICLE BATTERY R & D
SCHWARIZ, M. J. 1973 18 P.
NASA LEWIS RPT

CONSERVATION, ENERGY— RESIDENTIAL

HOW TO CUT FAT OUT OF YOUR HOME ENERGY BUDGET, Jan Adkins, Illus., SMITHSONIAN, March 1974, p. 54-64.

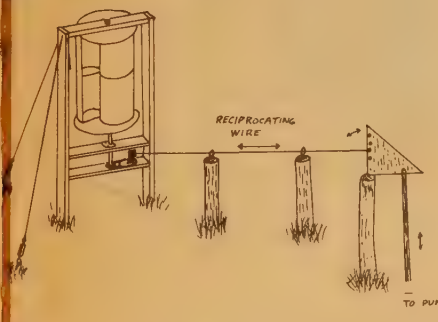
The lawn is an energy sink. To grow grass is to engage in a vast struggle against nature. It is fine in damp England, but grass was simply not supposed to grow in many parts of the United States. Except for the cooling effect of grass as opposed to concrete, a lawn is a classic model of the negative energy system. It takes 162,000 BTUs worth of natural gas to produce the nitrogen in a 50-pound bag of fertilizer. A 10,000 square foot lawn requires as much as five bags a season. It then takes half a million or more BTUs worth of gasoline to mow that much lawn, and the only product of all this input energy— the grass clippings— is usually thrown away instead of being put to use. . .' ARTICLE DEMONSTRATES IN FINE DETAIL AMERICANS EXCESSIVE USE OF LOW BUILDING AND PRODUCTION COSTS AT THE EXPENSE OF OPERATING EFFICIENCY.

The Journal of The New Alchemists

A nicely turned out journal describing the many activities and insights of the New Alchemists (Pg. 534). They work hard. Write to them for a list of their publications. They're particularly strong in biological systems.

—JB

The Journal of The New Alchemists
$25/yr membership
(Includes subscription)
from:
New Alchemy Institute-East
Box 432
Woods Hole, MA 02543



Solar Energy Digest

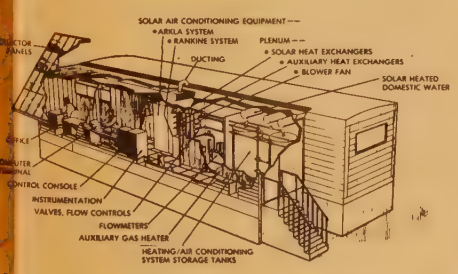
A brief monthly pamphlet giving short reviews, and comments on recent events, inventions, and publications involving solar energy.

—JB

Solar Energy Digest
$27.50/yr

from:
Solar Energy Digest
P.O. Box 17776
San Diego, CA 92117

Guide to Programs, National Science Foundation, 1974, is the title of a new publication which explains the inner organization and methods of procedure, so long a mystery to many, of this important fount of funds for solar and other scientific and technical research projects. Order from U.S. Government Printing Office, Washington, DC 20402. Price $1.25, stock Number 3800-00167.



The Honeywell Solar Heating/Air Conditioning Laboratory shown in the above schematic may be coming your way in the near future to correlate solar energy systems with local requirements, which vary widely over the United States.

In line with this purpose, local groups of designers, architects, builders, and zoning and building code officials in communities along its route will visit the laboratory to exchange information with researchers on specific needs in adapting such systems for use in their localities. When possible, stops will be made in the field where projects in solar energy heating and cooling research applications are under way.

The laboratory, which consists of two trailers (the one not shown is an "office"), is a joint venture of the National Science Foundation and Honeywell, Inc., Minneapolis, MN.

Write or phone public relations at either one for an itinerary, which is not available as we go to press.

Energy Digest

The grass-roots, low-tech movement has big brothers. NASA, Institute of Gas Technology, Oil Companies and other centralists, high-techers and energy conglomerates are exploring and dealing in the wings, soon to rush in, snap their meters on the sun and wind and lay their spread of Madison Ave. ASE devices on a befuddled public. Be aware of what the power base is up to. . . at least on the surface. Expensive scroll this. . . but it really lays out legislation, grants, contracts etc. of energy happenings . . . fossil fuel, nuclear and renewable. Muckraking and factual, but poor on motives and priorities.

—Richard Merrill

Energy Digest
$125.00/yr semi-monthly

from:
Scope Publications Inc.
1120 National Press Bldg.
Washington, DC 20004

In response to queries, an American Gas Assn. spokesman told Energy Digest that, while he had not seen Wilson's testimony, many producing wells were shut in because the industry considered them "not economically producible under current prices."

The spokesman agreed that "hell yes" more gas will become available as the price goes up because companies now consider it unprofitable to produce at current prices. He said he had not seen the figures on the joint undertaking described by Wilson in which five companies reported zero or very low reserves just before filing "substantial" sales contracts, and that he had "no answer for that."

The Mother Earth News

Mother has been around a while now and is doing the much-needed job of serving as clearing house and information exchange for back-to-the-land people. She's at her best on the farm, where articles showing how to raise three hogs or how to use pumpkins really tell you how to do it. (There's usually a vigorous feedback from experienced readers too, next issue). She's at her worst in technology where articles often exhibit poorly thought out devices and schemes that are mostly wishful thinking. There's a lively classified section where people can get together with others of like mind and "Plowboy" interviews of interesting personalities. Mother has been criticized by some as being excessively naive, but we note that even her detractors agree that she does a good job. The feeling of the magazine is strongly positive, which is a great pleasure these days. Good old Mother. (Mother also publishes a host of useful books, and back issues are available).

—JB

The Mother Earth News
$8.00/yr (6 copies)
from:
Mother Earth News
P.O. Box 70
Hendersonville, NC
28739

There are three ways to tell when the apple butter is done: (1) The sauce should taste sweeter than you like it to be (foods seem more sugary when they're hot than when they're cold). (2) It should have turned reddish-brown. . . the redder the better. (3) It should have stopped "weeping"; that is, the water should no longer separate from the pulp. The butter is not ready until all three of these requirements are met.

Machine Design

A magazine for professional engineers. Despite some highly specialized analysis, most of the articles (and the ads) are written so a layman can understand. Magazines such as this often serve as a portent of our technical future. This one is especially good.

—JB

Machine Design
$20.00/yr (31 copies)
Free to groups of 20 or more professionals and corporations

from:
Machine Design
Penton Plaza
Cleveland, OH 44114

Fortunately, the problems of fuel economy and soil damage are interdependent. An improvement in vehicle design that causes it to churn up less soil also contributes to more efficient use of vehicle power.

•

Should tundra damage occur in an area where there is enough relief for drainage to occur, we have a totally different story. The moving water will rapidly erode the frozen unconsolidated sediments commonly underlying the tundra mat. Often in this case, a small cut can become a deep gash 25 or more feet across and 5 to 10 feet deep. Recovery in this situation does not occur at all and regrowth of vegetation over the exposed edges can take well over 100 years. It is this damage that the conservationists refer to when they sound the alarm-cry.

•

. . . our lead in electronics is due not to any profound grasp of physics, but rather to our ability to keep rejection rates within reason while mass-producing electronic devices.

•

Tim Lefever, like the few others who built sun-heated homes two decades ago, must be mildly amused that the Government wants to prove the "feasibility" of solar heating. But other observers are alarmed that our vaunted free-enterprise system needs a $50-million federal infusion before it can build sun-heated houses for buyers who want them. Why has the system failed, for two decades, to provide sun-heated houses?

Earthworks

Earthworks— Foundations for Change plans to publish a periodical New Earth Times in "early 1975." A quarterly at a hoped-for $2.00 an issue stressing *how-to* achieve self-sufficiency. They're into other interesting things too, so far mostly proposed.

—JB

Information: stamped, self-addressed envelope to:
Earthworks
P.O. Box 252
Winchester, MA 01890

More Energy Info

See Pp. 468-473.

How Animals Work

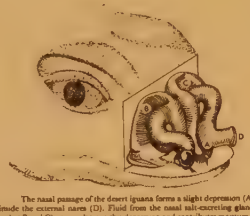
This book explains how kangaroo rats live in the hot desert where there is no water. It discusses how animals utilize heat exchangers to conserve body heat and moisture. I found it a useful book, because it discusses questions I have pondered and never seen mentioned elsewhere. Why do dogs pant? Why do they pant so rapidly? This is one of a number of everyday questions answered to my satisfaction. It is also a great pleasure to read a book by a well known professor and have him say that it was a student who solved an intriguing puzzle. Too often a professor later becomes confused and believes he was the one who solved the puzzle or the good idea is successfully ignored.

About ten years ago it was suggested by Eugene Crawford, then a student at Duke University, that dogs seem to pant at a resonant frequency (Crawford, 1962). Due to its elastic properties, the entire respiratory system has a natural frequency of oscillation, and to keep the system oscillating at this frequency requires the expenditure of only minimal muscular effort. As a consequence, the heat production by the respiratory muscles is at a minimum, thus adding only little to the heat load. Crawford estimated that if panting were to take place without the benefit of a resonant system, the increased muscular effort would generate more heat than the total amount the panting process can dissipate.

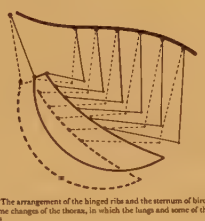
This book should be required reading for architecture students in dry climates. These are the subjects to explore, these are the lessons to learn.

—Steve Baer

How Animals Work
Knut Schmidt-Nielsen
1972; 114pp.
$1.95 postpaid
from:
Cambridge Univ. Press
510 North Ave.
New Rochelle, NY
10801
or Whole Earth



The nasal passage of the desert iguana forms a slight depression (A), just inside the external nares (D). Fluid from the nasal salt-excreting glands (located at B and C) accumulates in this depression and contributes moisture to the humidification of the respiratory air



The arrangement of the hinged ribs and the sternum of birds permits large volume changes of the thorax, in which the lungs and some of the air-sacs are located.

High-Low BOOM!

This little book (I was about to say primer) commences with a brief history of explosives. It then goes on to explain how to make certain explosives in the lab while at the same time cautioning the reader not to try it. There's a discussion of smokeless powder and making fireworks with chemical formulas and ingredients. Hmm.

—JB

High-Low BOOM!
(Modern Explosives)
Philip J. Danisevich
1966; 37pp.
$5.50 postpaid
from:
Hillcrest Pub.
P.O. Box 395
McDonald, OH 44437

The Science of Design

Mr. Glegg continues his useful thoughts (The Desi of Design Pg. 119) with special emphasis on helpi the designer/engineer handle scientific research. author contends that most designers are not com tent to set up and interpret experiments, and he illustrates this point (as usual) with horrifying examples and considerable wit. He then goes on show how experiments can be done and their resu put to use. The subject is not at all an easy one, as I can attest from experience. The book will be useful to non-professional designers too, as it is actually a treatise encouraging clear thinking set a from ego-pitfalls. The small number of pages per dollar is deceiving. All meat, and good reading to

—JB

The Science of Design
Gordon L. Glegg
1973; 94pp.
$5.95 postpaid
from:
CamLridge Univ. Press
510 North Ave.
New Rochelle, NY
10801
or Whole Earth

(1) You can define exactly a two-dimensional figure.
(2) You cannot define exactly a three-dimensional figu
(3) With (2) what you will see will be dictated by what you want or expect to see. In other words you are belie yourself, not believing the object. From this follows:
(4) A two-dimensional figure tells you nothing about it in three dimensions.

•

BIO-GAS

Although most sources of methane information agree on general principles, there seems to be a big problem persuading the devices to work and keep working. We know of many that did put out a bit of gas, only to be abandoned. We know of many that didn't work at all. Even if you do succeed in achieving a decent output, there's the problem of maintaining that output reliably and with a routine you'd care to live with. Still lots of work to be done here.

It takes more than the waste from one family to generate a useful amount of Methane unless you have a number of animals too. So a community Methane generator makes a lot of sense. An interesting reason for people to get together.

—JB

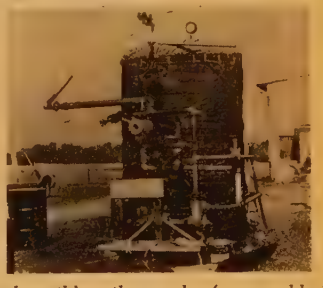
A Homesite Power Unit: Methane Generator

This seems to me to be the clearest and most finely detailed plan for a practical methane generator. But on the other hand, I've not personally built one yet.

—JB

A Homesite Power Unit: Methane Generator
Les Auerbacn
1973; 50pp.
$5.40 postpaid
from:
Les Auerbach
242 Copse Rd.
Madison, CT 06443

The compost leaving the digester is ready for spreading on the fields. The slurry should be fully digested. In instances where digestion has not been completed, nitrogen in the form of ammonia (contained in the water of the slurry) should be allowed to escape into the open air since immediate application to the land could cause harm to plants. The completely digested effluent is an excellent soil conditioner with the ability to render soils more friable, increase the infiltration and storage rates, facilitating deep moisture penetration and proper aeration to roots.



Dick Shuttleworth's methane maker (sponsored by The Mother Earth News*), ready for action on the Shuttlewo cattle farm near Redkey, Indiana.*

Methane Digesters for Fuel Gas and Fertilizer

Proven information that has been used to make working generators, including a small demonstrator made from an inner tube. Includes article by hog raiser L. John Fry, who actually made methane work in a useful way on a larger scale than many. (With bibliography).

—JB

Methane Digesters for Fuel Gas and Fertilizer
(With Complete Instructions for Two Working Models)
1973; 44pp.
$3.00 postpaid
from:
New Alchemy Inst. West
Box 376
Pescadero, CA 94060

This knowledge is useless without direct experience with small-scale *models* (which can be constructed cheaply from easily available materials). Once the digester is understood at this level, larger units can be built with more sophisticated ways of using methane gas energy and recycling sludge back into the biological systems.

In this newsletter we would like to: (1) present a general background of the raw materials and processes of digestion; (2) discuss some preliminary ideas for using methane gas and sludge; (3) describe two designs for building simple working models of digesters; and (4) develop feedback from readers who are working on digester projects across the country.

Bio-Gas Plant: Generating Methane from Organic Wastes

Makes it all seem a bit more simple than experience has shown to be the case, but is nonetheless a good booklet to read if you plan to utilize methane. Plans and specifications for several plants included.

Bio-Gas Plant Designs with Specifications

A number of designs for Methane generators (including some for cold climates). Detailed only roughly these plans need plenty of hard detailing and experimentation to be made practical. Many drawings.

—JB

Bio-Gas Plant
(Generating Methane from Organic Wastes)
Ram Bux Singh
1973; 95pp.
$5.00 postpaid (airmail)

Bio-Gas Plant Designs with Specifications
Ram Bux Singh
1973; 49pp.
$7.00 postpaid (airmail)

both from:
Gobar Gas Research Station
Ajitmal, Etawah, U.P.
India

Bio-Gas What and Why

The United States in 1963 produced 150 billion therms of natural and manufactured gas. The heat from all this gas would be enough to melt over 30 billion tons of ice and boil it away.

In 1969 the United States also produced 2 billion tons manure on its farms and fields. This can be estimated t occupy over 2 billion cubic yards of manure, or a 4 foo thick carpet spread out over an area of 20 miles wide a 25 miles long.

Another fact that is not generally known is that all this is capable of yielding a gas, very similar to natural gas i its makeup. The gas recovered from this much manure total about 24 billion therms. This is not enough to pr the large gas industry with any serious competition, but does represent a substantial amount of energy.

How can this gas be recovered? By using a bio-gas plan which dung and other animal and vegetable wastes can fermented anaerobically, and made to release a gas, whi mostly methane. In addition, this process yields a ferti rich in nutrients and humus.

Although this bio-gas plant is perhaps not practical for man's back yard, it can field tremendous application o both small and large farms, wherever there are supplies animal and vegetable waste. From 100 to 3000 cubic bio-gas can be produced per day; 225 cubic feet will pe the work of 1 gallon of gasoline. 100 to 150 cubic feet cook all the food a family of 4 to 6 will be likely to eat day.

Any one who is interested in conserving resources, chec pollution, and making the most of everything he has sh interested in bio-gas. This book will give an idea about scope, its uses, its history and its methods. The author been in charge of a research station for bio-gas in Uttar Pradesh in Northern India, for 10 years.

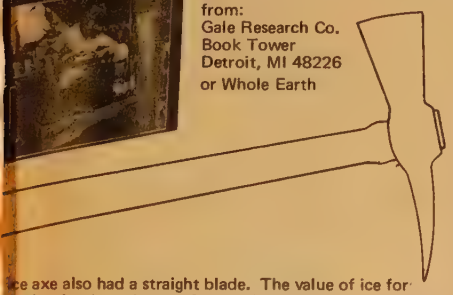
—Ram Bux Sing

untry Craft Tools

w did pre-industrial craftsmen make tapered holes for der rungs? How did they make round things? In a the-facts, ma'am manner, Mr. Blandford shows us the s and how they were made. Clear drawings show enough ou could do it too. Explanations of how to use the s are regrettably too brief, but you still get a good idea ow they did it then.

–JB

Country Craft Tools
Percy W. Blandford
1974; 240pp.
$8.50 postpaid
from:
Gale Research Co.
Book Tower
Detroit, MI 48226
or Whole Earth



ice axe also had a straight blade. The value of ice for erving food was known from at least the early nineteenth itury, when country estates had ice houses (favoured in nerica) or pits or caves (more usual in Britain). Winter ice m rivers and lakes was used for as long as it would last into summer. The tool that was used to trim blocks of ice was -handed, with a long thin blade and a pick at the other

ice saw was used with the ice axe for cutting blocks of for preserving food in an ice house. This was something e a small pit saw, but with very large spiked teeth.

•

quare piece, with teeth cut like a file, was called a 'drift' driven through a hole to true it to a square shape. The e name was given to a tapered round piece used to true nd holes or pull holes into line.

American Wind Turbine

One of the most promising new designs. They claim 50% efficiency! We'll see.

–JB

See Popular Science, July 1974. To get on mailing list, write:

American Wind Turbine
Thomas O. Chalk
P.O. Box 446
St. Cloud, FL 32769

The Storage Battery

The men who make 'em give what you need to know about choosing, using and caring for batteries, in simple language (thank goodness). Yet there are so many variables, that Batteries are still a bit of a Black Art even in this HiTech age. You'll get a good start understanding them here.

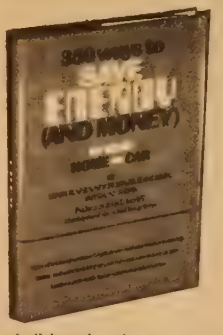
–JB

The Storage Battery
(lead-acid types)
1969; 34pp.
$1.00
from:
Exide Power Systems Div.
ESB Inc.
Philadelphia, PA 19120

350 Ways to Save Energy (And Money)

In contrast to sappy pamphlets put out by energy companies, this book really gets down to principles. The authors have done their homework, and aren't afraid to even suggest that you stop using the appliance altogether! Amazing.

–JB



350 Ways to Save Energy (And Money)
(In Your Home and Car)
Spies, Konzo, Calvin, Thoms
1974; 198pp.
$3.95 postpaid
from:
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth

A dishwasher does not use any more hot water than hand washing might if it is used only when it has a full load. . . . **Run the dishwasher only when there is a full load. Open the dishwasher and let the dishes air-dry rather than using the drying cycle. This can cut the normal energy consumption in half. The dishes should be hot enough to dry quickly in any case.**

•

Bowing to the great American need for styling, the refrigerator manufacturers have hidden the condenser coils under the machine rather than mounting them in an exposed position on the back as was done earlier. This means yet another motor and fan in order to blow air past this concealed coil, rather than allowing room air to flow over the coils by convection.

6

TONGUE FU BECOMES A FELLOW TRAVELER

Captain Mediafreak and Tongue Fu decide to make a w extremely-low-budget film shorts.

On Monday, they shoot *Community Control,* following ant carrying another ant on its back along the ewalk, with a record of *He's Not Heavy, He's My ther* serving as the soundtrack.

On Tuesday, they shoot *Counter Clockwise,* capturing roup of pre-teenagers on the Carousel in Central Park, ssing around a joint as their painted horses slide up and wn.

On Wednesday, they shoot *Energy Crisis,* immortalizing e sales pitch for a portable electric artificial vagina in a welty items store.

The next day, Chocolate Graham keeps her appointment the film partners' abandoned newsstand. She joins in on eir cannabis-sharing rite while the TV news is on.

Walter Cronkite finishes delivering the weekly war dead atistics when Captain Mediafreak suddenly snaps his ngers and says, "It's the body count– today must be hursday– who wants to take some acid with me?"

All three swallow their LSD tablets with the aid of each-flavored kefir, while Eric Sevareid gives his official pinion of an upcoming space mission.

"I could do news analysis," Captain Mediafreak says. Look, they don't even show his body. They could just lace me right on top of the table."

"With all the television you watch," Chocolate Graham asks, "what's the most significant pattern you've observed?"

"I'd say" –Captain Mediafreak ponders her question– "the tendency to divide people of different backgrounds in the guise of bringing them together."

"But what about the infiltration of counter-values?"

"It's pretty schizoid. Susan St. James'll go on the Merv Griffin show and talk about the importance of being a vegetarian, but then she'll be on *McMillan and Wife* and order a steak dinner. Or Blythe Danner'll tell a *TV Guide* interviewer that she doesn't wear any makeup, but then she'll wear makeup on *Adam's Rib,* which ironically is supposed to be about a liberated woman."

"And, finally," Walter Cronkite is saying, "CBS learned today that the late Judy Garland had a clause in her will requesting that the makeup man from *Green Acres* be hired to apply the cosmetics to her face while her body lies in state. In Hollywood, however, Eva Gabor, star of the situation comedy, refused to grant him a leave of absence. And that's the way it is."

"And that is the way it is," repeats Tongue Fu.

He takes out his kazoo and evokes from it a calming falsetto melody.

Chocolate Graham listens for a while, then says: "Only an ordained Patoonga priest could play a kazoo like that. May I see your bellybutton?"

Tongue Fu takes off his shirt.

Chocolate Gaham stares at his bellybutton, which stares unceasingly back at her...

Flashiebackie:

Luke Warm Sake is tattooing a third eye on the bellybutton of post-adolescent Tongue Fu, whose shaved head is betrayed by a five o'clock shadow.

"Ah, yes, Anteater, bellybuttons are what we all have in common, yet no two are alike, as with snowflakes and fingerprints. Bellybuttons are my specialty, but once I tattooed everything from a ladybug on a lady's thigh to a pornographic mural on a gentleman's entire body.

"During the war I was taken prisoner and coerced into decorating the bodies of my captors. One officer insisted that I perform a tattoo on the space between his lips and nose. I had to be extremely careful with the needle. He forced me to inscribe 'Fuck the Japs' there above his upper lip. Perhaps he has grown a mustache.

"There we are, Anteater, all finished. As a Potoonga priest, I have rendered you separate but equal. That did not hurt as much as your anticipation, did it? Remember to contemplate the illusion of pain, and it will disappear as easily as removing lint from your third eye...."

Chocolate Graham is dancing to the beat of Aretha Franklin singing *Respect.*

When the record ends, she asks Tongue Fu, "Shall I show you what the sound of one hand clapping is?"

With an intensely gradual approach, she moves her right hand until it comes to rest on his left cheek. He does the same. Then their hands glide into a spontaneous hugging. They bring Captain Mediafreak into their embrace. It is he who breaks the silence.

"You'll hafta excuse me now, I've gotta watch the Waltons."

Tongue Fu seems perplexed. "Am I not supposed to follow the Waltons?"

"I checked the schedule. Your summer replacement starts tonight."

Chocolate Graham is removing her clothes. Tongue Fu does likewise.

And then, with neither one speaking a word, they begin to make love, each touch emanating from such total attention that it all appears to be happening in exquisite slow motion.

As Captain Mediafreak watches the Waltons finding joy in the depression, Tongue Fu is going down on Chocolate Graham, and she is going up on him.

Now she is astride him, their genitals mingling in a maze of colors.

"There is only now," he struggles to say, as if to avoid becoming lost in the mounting tension, but his psyche yields to her uninhibited spasms with his own inevitable ejaculation, so that he can barely whisper in the soft afterglow, "and that's already gone."

Tongue Fu has had his first contraction.

/Continued, page 553/

SOFT TECHNOLOGY

Duct Tape

Duct tape ("Ducktape") is an all purpose heavy duty tape (though it won't withstand weathering very well). Arno, one of several reputable manufacturers, sells this and a huge variety of specialized tapes including handsome polished metal. If your larger hardware store doesn't stock it, you can get Ductape mail order.

—JB
[Suggested by J.D. Smith]

Duct Tape Roll
$1.59 postpaid
(30' x 2")

from:
Midwest Mail Service
P.O. Box 1148
Elkhart, IN 46514

Magnets

Magnets have many more uses when they come in a variety of styles. These folks stock many types, including strips, at good prices.

—JB

Catalog
from:
Maryland Magnet Co.
8825 Allenswood Rd.
Randallstown, MD 21133

"Job Master" Permanent Bar Magnet

PULLS UP TO 60 POUNDS *

This lifetime magnet will never rust or lose its strength. Hundreds of uses in home or shop:

- PICK UP HOT OR GREASY METAL
- RECOVER STEEL FROM VATS OF LIQUID
- RETRIEVE UNDERWATER OBJECTS
- SEPARATE FERROUS FROM NON-FERROUS METALS
- PICK UP SPILLED TACKS, SCREWS
- USE AS A CLAMP IN THE SHOP
- REACH CANS OR OTHER OBJECTS ON TOP SHELF OR IN INACCESSIBLE PLACES

#742 . . . . . Only $2.25

Aladdin again

Steve Wasserman sends these tips for Aladdin lamp users:

The taller the chimney, the brighter the light. The N-105 tall chimney is nice to use, especially for folks living above 4,000 ft. You may also use a second chimney (even if cracked or broken), and slip it down over the first.

If you turn the heat up too high, and the mantle gets blackened, just sprinkle a little salt down the chimney, and the mantle cleans itself off in seconds.

I'd advise ordering some spare parts (mantle, wick, chimney), because if yours should break, you would be without light until a replacement arrived.

He sells Aladdin equipment at a 25% discount. (See Pg. 99).

Catalog
25¢

from:
Country Light
P.O. Box 1219
Fort Collins, CO
80521

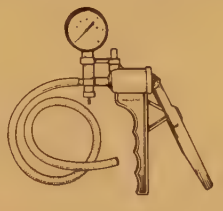
Nalgene Labware

Plastic lab equipment of unusually good design and utility presented in a catalog that makes one wish one had a spare $300.00 to spend. They'd prefer you'd attend your local dealer. Send for the catalog only if you're serious.

—JB

Catalog
from local dealer
Nalgene Dept. 4116C
Nalgene Labware Division
Rochester, NY 14602

Nalgene Hand-Operated Vacuum Pump with Vacuum Gauge
White high-impact styrene pump and gauge housing.



With a few squeezes of the handle this pump attains and holds a vacuum of 25 in. Hg. Equipped with sensitive vacuum gauge to monitor vacuum in both centimeters and inches of mercury. Pumping rate is 15cc per stroke. Fitted with valve to release vacuum without disconnecting pump from line. Entire unit weighs less than ½ pound and is sealed, self-lubricating and corrosion-resistant. Two-way pumping action for transferring liquids in either direction. Nozzle fits standard ¼" I.D. tubing— use it with the Nalgene Filter Unit, No. 2176 Pour Spout, Vacuum Desiccator or Vacuum Chamber. Supplied with 2-foot length of ¼" I.D. Nalgon vinyl tubing.

Aerolite Glue

Aerolite glues are well regarded, and come formulated for a wide range of uses, including sailplane construction, skis, and boats.

—JB
[Suggested by Pammy & Bau Graves]

Catalog
from:
Leavens Bros. Ltd.
2555 Derry Rd. E.
Mississauga, Ont.
Canada

Motor Holders

Many times one can obtain used fractional horsep electric motors free or at very low cost from old appliances, such as washing machines. However, usually do not have any base. This makes them difficult to use. These holders will work with any motor from 5-1/16" to 6-11/16" diameter, which encompasses virtually all of the various appliance motors. They are available at (Postpaid prices) $2 each, 2 for $4.00, or 3 for $5.50.

—Karl C. Thomas

from:
E. L. Walstedt & Co.
11801 92nd Ave. N.
Osseo, MN 55369

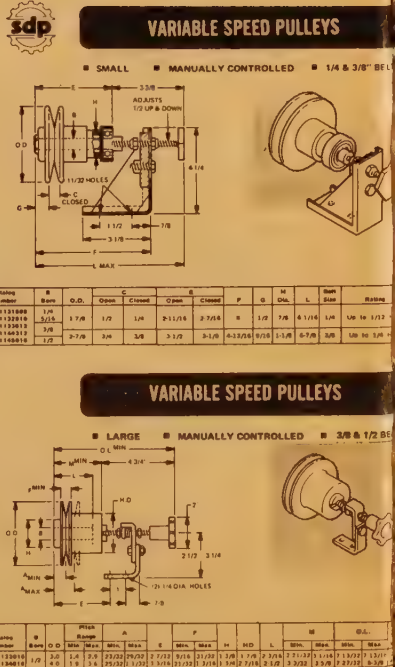
Drive

A satisfyingly fat catalog of power transmission parts an asspciated hardware. Typical, it contains formulas and necessary to help the designer choose components. For non-engineer, the book is still useful; the casual browse will learn of many available parts that he perhaps didn't know existed, and get some idea of how to use them. T sort of input can become quite useful, as it tends to rais person's intuitive overall understanding of mechanics.

—JB

Stock Drive Products
(Handbook of Commerc Drive Components)
1971; 330pp.
$1.49 postpaid

from:
Stock Drive Products
Div. of Designatronics,
55 S. Denton Ave.
New Hyde Park, NY
11040



he New Glassfibre Book

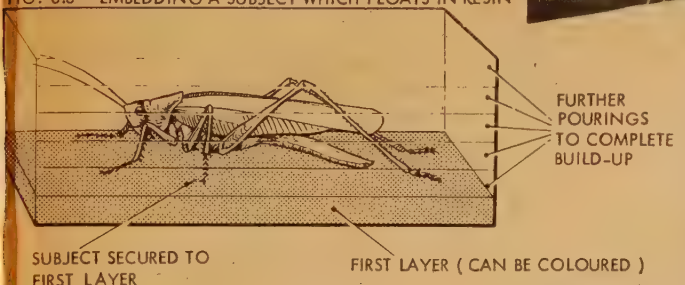
generalist handbook of fiberglassery stressing rinciples and methods (tricks-of-the-trade) rather han specific projects such as car bodies. The list of upplies will have to be converted to USA trade-ames, but the book is otherwise a very useful guide working with this material. Richer than most.

—JB

[Suggested by Bob Cunningham]

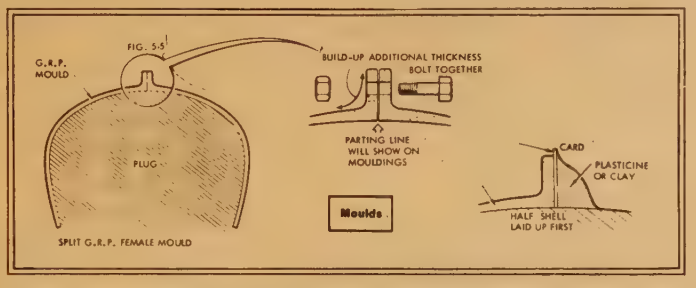
The New Glassfibre Book
R. H. Warring
1971; 128pp.
$4.50 postpaid
from:
Motorbooks International
3501 Hennepin Ave. S.
Minneapolis, MN 55408
or Whole Earth

FIG. 8.3 EMBEDDING A SUBJECT WHICH FLOATS IN RESIN



Encapsulation

An exactly similar technique can be applied when potting or encapsulating functional objects, such as an electronic circuit. In this case, though, it is an advantage to mix a filler with the resin to reduce the amount of shrinkage. A preferred filler for electronic encapsulation is mica dust, or similar inert organic filler used in the proportion of between 20 to 30 parts by weight to 100 parts of resin.



The Plastics Factory Catalog & Handbook

A catalog mostly of fiberglassing and casting resins, associated materials, and tools. But with a difference . . The Plastics Factory is a family enterprise and everything in the catalog has been chosen or specially prepared as the result of experience. There is a detailed commentary accompanying each article so that the beginner can choose intelligently. Looks like nice folks.

—JB

Catalog
from:
The Plastics Factory
119 Avenue D
New York, NY 10009

Flexibilizer

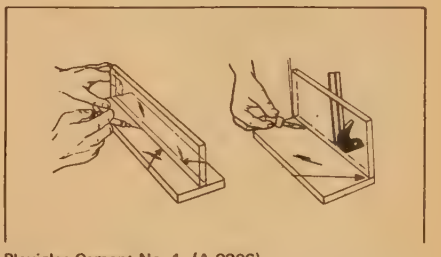
Adds resiliency and impact resistance. Imparts:

— FLEXIBILITY: Invaluable for jewelry and other curved items (Bracelets)
— IMPACT RESISTANCE: The original Klacker balls that kids used had this ingredient; they didn't crack. When manufacturers tried to cut corners and eliminated flexibilizer they became brittle and were taken off the market.
— EXTREME ABILITY TO WITHSTAND SHOCK: A kayak or boat can hit the dock pilings, or a rock, and still be seaworthy.
— BENDABILITY: Fiberglass furniture will be serviceable for years if you treat the resin with this liquid.

When you are making *anything* which might become brittle or needs the above characteristics, this is a useful goody!

Available in pints, quarts, and gallons.

•



Plexiglas Cement No. 1 (A-2206)

Solvent-type liquid. Brush or apply with syringe to one surface & quickly join the other. Bonds in seconds; non-flammable, clear, water-thin liquid good with Lexan, Lucite, Plexiglas, Acrylite, & all other acrylics. Use for furniture, sculpture, signs, letters, & domes. Also for polystyrene & butyrate. Available in 8 oz. & quarts.

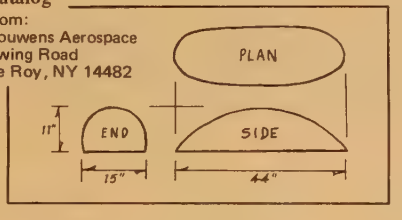
lexiglass domes

ne way to cut electric and heating bills is to install ylights. Bulged ones are stronger and shed dirt etter than flat ones. Here's one source (they're ade for surfer vans) and in larger cities you can kely find others. Skylight bubbles without frames re drastically cheaper than store bought ones with etal edges. You only need those edges if you want he skylight to open, and even then you can often et away without them. Heat gain and loss through ylights can be controlled with shades or Zome-ork's Skylids. (Pg. 531). You might be pleasantly urprised at how nice a dingy room becomes when you make a hole in the roof.

—JB

[Suggested by Lloyd Kahn]

Catalog
from:
Bouwens Aerospace
Twing Road
Le Roy, NY 14482



its & Plans

hat a nice service. The master index lists kits & lans available from Air boats to Yurts and leads you the annotated company index which spells out at's available, costs, and some description. I ope subsequent versions of the book will add ality evaluation to the fine access.

—SB

Kits & Plans
(Thousands of Available Kits and Plans for the Budget Minded)
Joseph Rosenbloom
1973; 273pp.
$3.95 postpaid
from:
Oliver Press
1400 Ryan Rd.
Willits, CA 95490
or Whole Earth

o Schrimsher's Custom Knifemaker's Supply
. Box 11448
llas, TX 75223

oducts: Knives, hunting/Bowie

its and supplies for making high quality knives. Makes a rong point about not handling anything less than the ast quality materials—— at a reasonable price.

page illustrated catalog 50¢ .

•

Dak Hydrofoils
P.O. Box 71
Sausalito, CA 94965

Products: Hydrofoils

Kits with plans for adding hydrofoils to catamarans. These hydrofoils are made of aluminum. This is the first company in the field of hydrofoils for sailing boats.

Information free.

•

Nomadics - Tipi Makers
Star Route, Box 41
Cloverdale, OR 97112

Products: Tipis

Kits and instructions for making your own tipis. Manufacturers of tipis make them generally as a novelty. However, the tipis designed by Nomadics are meant to be lived in and, in fact, are lived in. They are designed to withstand the rigors of mother nature at her worst.

Information on the anatomy and philosophy of tipis and the kits 25¢ , to cover cost of mailing.

•

Robbins Lightning Protection Co.
P.O. Box 440
124 E. Second St.
Maryville, MO 64468

Products: Lightning protectors

Lightning protection systems for home, farm, or business.

Kits, plans, instructions. Also components and parts. Products are Underwriters' laboratories inspected and approved.

Illustrated catalog free.

•

Crower Cams & Equipment Co.
3333 Main St.
Chula Vista, CA 92011

Products: Engine stands; Hot rod hardware

Precision, quality cam kits with a full line of custom valve train components. Also a new Cylinder Head Modification Department, Fuel Injection Department, Crowerglide Clutch Department and complete Research and Development Department. In addition provides an engine stand kit, the "Husky Boy" with a universal adapter. No additional adapters are necessary. Holds all automobile engines, cylinder heads, automatic transmissions. The fully adjustable arms fit any bolt pattern.

112 page illustrated, information packed catalog $1.00.

•

Stewart Aircraft Corp.
Martin Rd.
Clinton, NY 13323

Products: Airplanes

The "Headwind" is a small, easy to build, inexpensive airplane. It was the first VW powered airplane in the United States. Welded steel tube fuselage and tail structure, simple to construct wooden wing structure make it possible to build for approximately $990.00.

Information free.

•

Techni-Kit
Universal Electronics Co.
17811 Sky Park Circle Box 4517
Irvine, CA 92664

Products: Power suppliers, AC-DC; Power suppliers, regulated/variable.

AC to DC power supply kits with instructions, regulated and unregulated. 450 models to choose from. Professional design at hobbyist prices.

Illustrated catalog free.

Craftsmanship Catalog

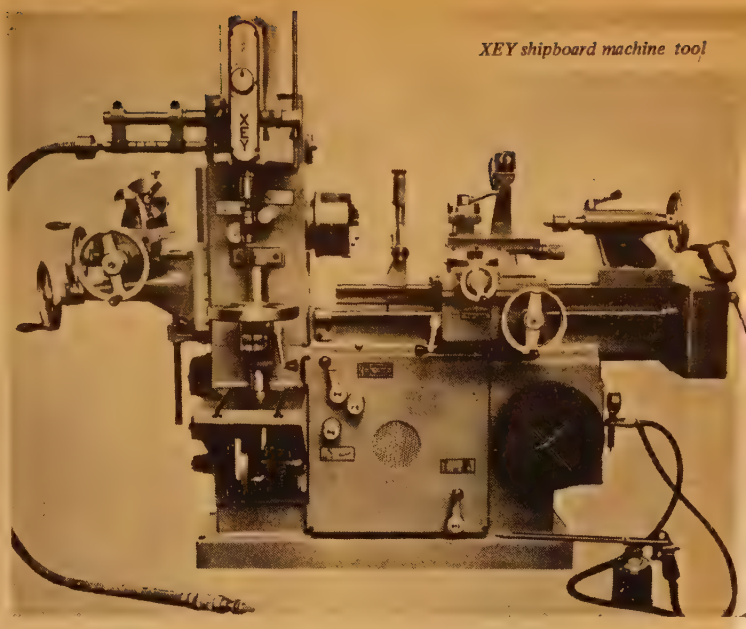
A fine catalog of model steam engines, make-it-yourself clocks, the precision tools needed, and an especially good library of shop skill books. Lots here for the steam power people.

—JB

Catalog
from:
Caldwell Industries
Box 170
Luling, TX 78648

A hot air engine works on the expanding & contracting of air as it absorbs or gives off heat. This is a nicely sized, fairly simple model that works by an open flame in the base. The burner can be a candle, alcohol burner or anything similar. These engines will not produce a lot of power when compared with a steam or gasoline engine of the same displacement. But we do get a lot of letters which state "Gee, I built it and it ran," almost as if they were surprised. As a model, the most important thing may be that no ignition system or boiler is required. Drawings $2.95. Castings $79.95.

XEY shipboard machine tool



The XEY was designed for shipboard maintenance use. Here all of the tools are necessary in a minimum amount of space, and the XEY fits the bill. To you, the individual, this is important. This means that the machine was designed for long, hard emergency service with a minimum amount of down time. It will function well for many years. At least one XEY is operating on a remote Wyoming ranch where ranch equipment is repaired locally rather than a two-day drive into town. SPECIFICATIONS: LATHE-14" swing by 28" or 40" bet. centers— 6 speeds 50-720 rpm. DRILL PRESS— 1" capacity in steel, 10" plate. HORIZONTAL MILL— 6" x 20" table, travel 12" longitudinal, 11" vertical, 4½" tranverse. HACKSAW—12" blade, 63 strokes/minute. 7" wheels @ 2400 rpm. PRICES: 14" x 700 mm $3,245.00, 1000mm 14" $3,595.00.

This item really caught our eye. It might be just the th for a community shop. I want one!

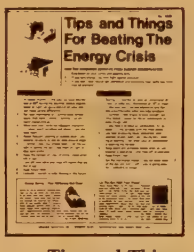
—JB

Heat Pipes

Heat pipes are one of the more fascinating and promising technological wonders. They look like a simple pipe, have no moving parts, and need not be made from exotic materials. They take heat from one end to the other with hardly any losses, and thus have a great potential for raising the efficiency of many thermal devices. For example, an array of heat pipes in a chimney could transfer that wasted heat to the room. These abstracts are the best source on the subject. UNM also publishes similar papers on noise pollution and hydrogen energy. A quarterly updating service is available. The prices are stiff, but realistically reflect the labor of collecting so much information.

—JB
[Suggested by Ben Wolff]

Brochure
from:
Technology Application Ctr.
Univ. of New Mexico
Albuquerque, NM 87106



Tips and Things for Beating the Energy Crisis
8pp; free

both from:
Edmund Scientific Co.
Barrington, NJ 08007

	Furnace Flue Size	Shpg. Wt.	Stock No.	Price T.C.C.
Residential Type Fuel Miser	5"	17 lb	19,194	$ 99.00
Heat chamber: 12x12" dia.	6	17	19,195	99.00
Fan CFM: 150 **A**	7	17	19,198	99.00
BTU: 16,000	8	17	19,196	99.00
Industrial/Commercial Type Fuel Miser.	6"	25 lb	19,191	$119.00
Heat chamber: 16x12x12"	7	25	19,197	119.00
Fan CFM: 265 **B**	8	25	19,192	119.00
BTU: 24,000	10	25	19,193	119.00

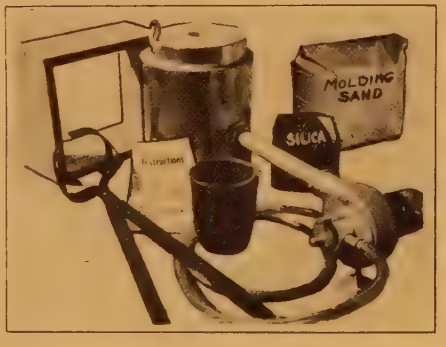
Edmunds sells a variety of energy-saving devices such as this heat-pipe array which extracts otherwise wasted heat from flues. They're all listed in **Tips and Things for Beating the Energy Crisis.**

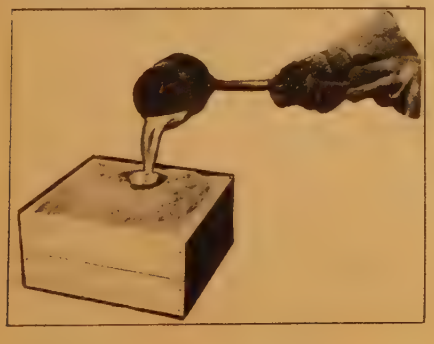
Small Foundry

I haven't actually seen one of these outfits, but they appear to be typical of the breed. This one seems to have a better-than-average blower system. Sets range from 3 lbs to 53 lbs and they claim iron, bronze & aluminum can all be easily handled. The ability to make castings adds an interesting capability to any shop or studio. For instance, you can cast duplicates of damaged or missing parts of old wind generators. . . .

—JB

Catalog
from:
Pyramid Products
3736 South 7th Ave.
Phoenix, AZ 85041





Metal Capacity	Model No.	Shipping Weight	Price Of Set
* 3 lbs.	1	65 lbs.	$ 67.50
10 lbs.	4	100 lbs.	79.75
20 lbs.	8	140 lbs.	98.50
36 lbs.	10	210 lbs.	129.50
53 lbs.	16	265 lbs.	159.75

Steam Powered Vehicles

Plans, parts and complete steam conversions of cars motorcycles and even bicycles (!). To do-it-yourself considerable machine shop skill is required, but apparently the things will run.

—JB

Catalog
50¢
from:
Richard J. Smith
Automotive Steam Systems
8591 Pyle Way
Midway City, CA 92655

Sandblaster

Just the thing for removing paint and scale from antique machinery. Also etches glass and sprays liquids hard. (You need a compressor too.)

—JB

Catalog
from:
Gaspar's Products, Inc.
P.O. Box 327
New Hyde Park, NY 11040

Sandblaster $23.95 postpaid

China at Work

An illustrated Record of the Primitive Industries of China's Masses, Whose Life is Toil, and Thus an Account of Chinese Civilization.

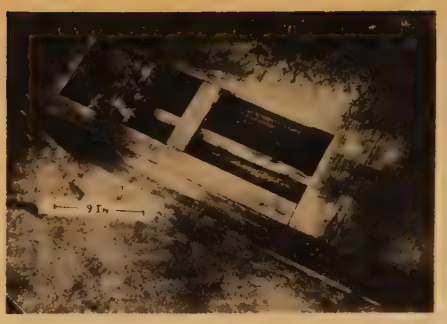
This was originally published in 1937 by a man with good eyes. It's an amazing array of pre-industrial Chinese tools for making what is needed for feeding, clothing, sheltering and transporting a people who were and are necessarily adept at survival. Everything is illustrated with photographs (sometimes fuzzy but always readable) that include a scale rule so that you can get a good idea of sizes and proportions. Tool-making tools are included too. The text clearly describes how to make and use them all. The tools shown are crude, but nonetheless highly refined as the result of thousands of years of development. They didn't waste anything, especially metal; methods of using scrap are stressed. The book not only shows enough detail to permit the reader to make similar tools for himself, it also transmits an attitude towards tools and their use that helps explain events in China today. I felt indicted as a wastrel as I read and learned.

I'd like to make clear that this book is quite extraordinary, especially at the low price. It's one of those you keep jumping up and showing to bystanders as you find yet another beautiful item.

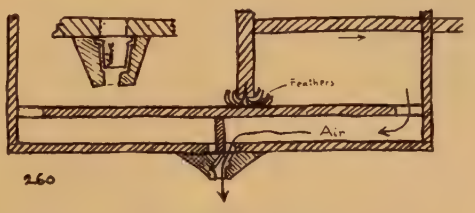
—JB
[Suggested by Jerry Maddox]

China at Work
Rudolf P. Hommel
1937; 366pp.
$3.95 postpaid

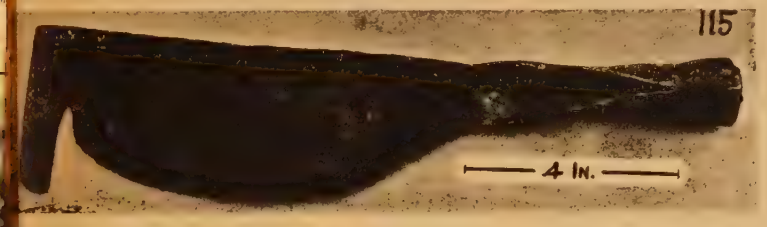
from:
MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth



Box bellows with top lid removed, showing feathers that seal piston.



Section through box bellows, with top cover not shown. Note feathers used as gasket. It pumps on both push and pull strokes, producing a nearly constant air output.



Firewood cleaver. Projection prevents blade from striking ground, making chopping block unnecessary.

Handmade

Drew and Louise Langsner recently traveled around Europe and the Near East, staying away from tourists, and taking care to meet the simple folks who were still doing things the old way. Eventually they apprenticed themselves to a Swiss maker of wooden milking buckets. As they traveled, they recorded the architecture, hardware, and even recipes of the people they visited and worked with. This is a beautiful, unusually personal book.

—JB

Handmade
Drew & Louise Langsner
1974; 192pp.
$4.00 postpaid

from:
Harmony Books
Div. of Crown Pub. Inc.
419 Park Ave. South
New York, NY 10016
or Whole Earth

Bearproof meat storehouse from Lapland.

Milking buckets.

Cream of Nettles

Gather one large bucketful of nettle greens— tops and first sets of leaves from young, tender plants. Wear gloves to avoid stings. Wash greens by stirring in water with a long-handled spoon. Pour this water off, then pour one quart or more boiling water into the bucket with the greens and cover as if brewing tea. Let stand a few minutes; nettles will lose their stinging properties. Drain in a colander, saving the juice in another pot. Chop greens fine with knife or kitchen shears. Melt a good amount of butter (4 Tbs.) in a large deep skillet. Sauté a chopped onion and minced garlic clove. Add nettles. Stir in ½ to 1 cup cracked or bulgar wheat. Add reserved nettle "tea" gradually as needed. Cover with a lid and stir occasionally until wheat is soft. Add salt to taste. Remove from fire and stir in 2 to 3 tablespoons cream or sour cream. Serve with hot baked potatoes.

Making Do

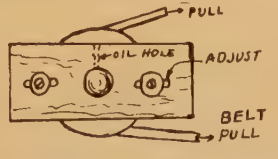
A 70 year old man who has been living low budget for many years tells some of his tricks. He's tried a lot of things. Crude drawings are shown for everything from hot water heaters to home made lathes. Most of the things he shows could be figured out by many common-sense type people, but his contention (probably true) is that many younger people have not had enough experience building things and thus have no intuitive feel for "making do." He includes many forgotten arts like making wooden bearings.

—JB

Making Do
Arthur M. Hill
1972; 148pp.
$3.95 postpaid

from:
Ballantine Books
457 Hahn Rd.
Westminster MD 21157
or Whole Earth

For moderate speeds and loads an oil-soaked block from such woods as mahogany, oak, walnut, or maple can make satisfactory bearings. The wood must be thoroughly dry. Scraps of these woods may be obtained from lumberyards, furniture factories, or even from old pieces of furniture that are beyond repair. Scraps of oak flooring are especially easy to obtain. Design your installation, if possible, so that the major load comes on the end grain of the wood— it has the greatest crushing strength. Drill the hole for the shaft, drill an oil hole to connect with that hole, and then add some form of mounting holes.



When drilling the hole for the shaft try to make it perpendicular to the mounting surface. If the hole needs enlarging slightly for an easy fit on the shaft, do *not* use sandpaper or emery cloth. Particles become imbedded in the wood. Enlarge the hole with a small round rattail file or use a half-round rasp.

The mounting holes may be round to accommodate bolts, or screws, or, if it is anticipated that adjustment will be needed, an extra large round hole may be used with a round head screw and washer— or perhaps an oblong hole for greater movement. See Figure 1. After the holes are all correctly done, soak the block in engine oil, number 10, either new or used, for one to three days, depending on your patience, and the size of the block. New oil will smell better but the *cost* of the oil might smell worse.

600 More Things to Make

American Ingenuity of fabled quality may not be found in everybody. Moreover, if you have to make a feed hopper, just how far apart do you make the boards so that the feed comes out like it's supposed to? This book (and presumably the two that precede it, as it is Volume 3) is just solid packed with drawings, photos and diagrams of construction you'll doubtless need sooner or later around the farm. Most of the stuff is pretty crude, which is in keeping with what's really needed, usually. The authors assume a certain expertise with farm shop tools, but as with most farm equipment, common sense prevails. This was written just before everything went crazy with fancy hardware at great expense. Should be truly useful to the back-to-the-landers.

—JB
[Suggested by George de Alth]

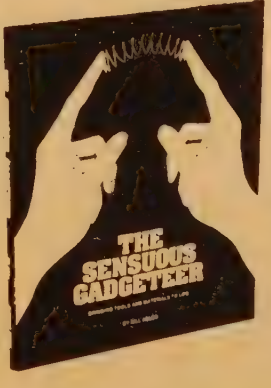
600 More Things to Make
G. C. Cook and
L. J. Phipps
1952; 599pp.
$7.95 postpaid

from:
Interstate Printers & Publishers, Inc.
Danville, IL 61832
or Whole Earth

The Sensuous Gadgeteer

This is a truly useful book for those who make things or who would like to be able to make things. After years of being a professional thing-maker I find much I didn't know here. Better, it's a good reference in case you need to solder something but have forgotten how, for instance. But best of all the book is written in an encouraging, friendly way so that the Mysteries of the Shop are revealed about as much as they can be short of lousing up some material practicing. Virtually all common shop practices are shown, explained, and illustrated. Many of the basic principles involved in various shop tactics are explained so that you learn in depth. My only regrets arise from a basic philosophy he holds: "Overbuild everything." This is how a lot of American Waste gets generated, as that attitude tends to discourage sharp thought. Bill Abler wants you to make things as easily as he does. With this book and a few brains, you probably can.

—JB



The Sensuous Gadgeteer
(Bringing Tools and Materials to Life)
Bill Abler
1973; 113pp.
$4.20 postpaid

from:
Running Press
38 South 19th St.
Philadelphia, PA 19103
or Whole Earth

•

The finished product is only the garbage of the work. It is the making of it that must be enjoyed. Then the excellent product will take care of itself.

Craft

The entire Crafts section was researched and edited by weaver and sandal-maker Diana Sloat (DS), who slogged through endless swamps of bad new craft books to collect these choice specimens. As sewing-reviewer Judy Sears commented, "Many, many sewing books have been published on the wave of demand from our hungry culture looking for its forgotten crafts. Some of them are outright lousy. Many, mediocre with lots of pages and glossy photographs. And with patience there is the cream."

—SB

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Access to Crafts Books

Buying a book you've never seen is chancy. These annotated sources will ease the strain.

—DS

The Unicorn
(formerly Craft & Hobby Book Service)
Box 645
Rockville, MD 20851
Excellent textile book selection. Send $2.00 for 4 editions of catalog/yr, or a large stamped self-addressed envelope per specified area of interest: batik, leather, textile, etc.

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5509 College Ave.
Oakland, CA 94618
Extensive range of textile books, carefully selected. Catalog 50¢.

K. R. Drummond,
Bookseller
30 Hart Grove,
Ealing Common
London W.S. England
Incredible textile book selection; haven't seen the other areas. Many small publishers. Long wait for books but no duty. Send one international stamp coupon per each specified area of interest, or or 2 coupons for 3 areas. (5 pence = 1 coupon)

U.S. Dept. of Interior,
Bureau of Indian Affairs
Publications Service
Haskell Indian Jr. College
Lawrence, KS 66044
(Not very annotated but too good to leave out), inexpensive books on native American crafts. (Their books go in and out of print frequently so wait a month and write again for a specific book.) Catalog free.

Museum Books, Inc.
48 E. 43rd St.
New York, NY 10017
Wide selection of crafts books in every area. Catalog free.

Crafts for Today

Extensively annotated catalog of U.S.-published crafts books. Good, but will soon be dated in contrast to other craft books sources with mimeographed catalogs.

—DS

Crafts for Today
Rolly M. Harwell &
Ann J. Harwell
1974; 211pp.
$9.50 postpaid

from:
Libraries Unlimited, Inc.
P.O. Box 263
Littleton, CO 80120
or Whole Earth

APPRENTICESHIP: Bolinas Craftsman's Guild

Formed to offer this time-honoured approach to crafts education, the Bolinas Craftsman's Guild, (Non-profit) functions as a loose family-like unit of some 25 independ and self-supporting craftsmen in the area. In the two years since their formation they've had over one hundred students participate in film making, furniture making, guitar making, instrument making, jewelry, leather clothing, photography, pottery, print making, sculpture (bronze), stained glass, weaving & fabric construction, and woodworking. A good venture; the one-to-one relationship is a fine way to learn.

Apprenticeships cost $130-$250/month. For informatio write:

Tom D'Onofrio, Coordinator
Bolinas Craftsman's Guild
Bolinas, CA 94924

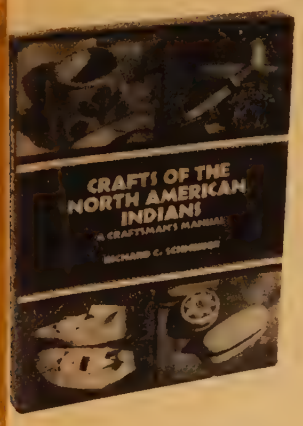
If such programs function in your area we'd like to hear about them.

—DS

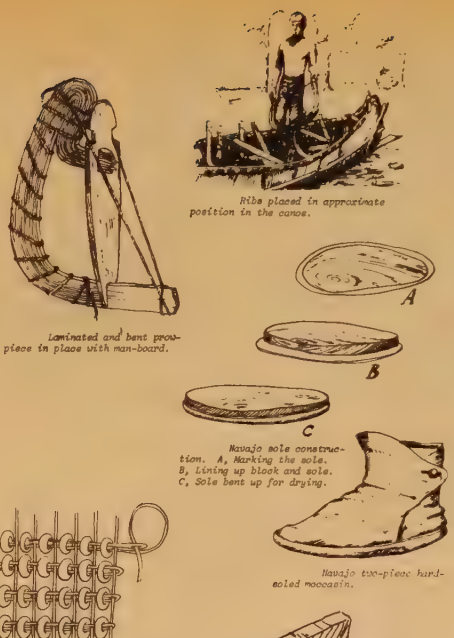
Crafts of the North American Indians

American Indian genius. Comprehensive, practical. Sections on tools, skin and leather work, bead work, splint & birchbark baskets, and constructing a birchbark canoe particularly fine. Top book, long awaited. Covers primarily woodland Indian crafts—— we hope Schneider goes on to other regions.

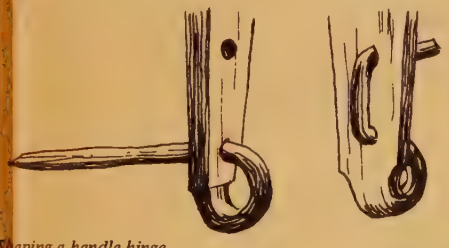
—SB & Susan Druding Jones



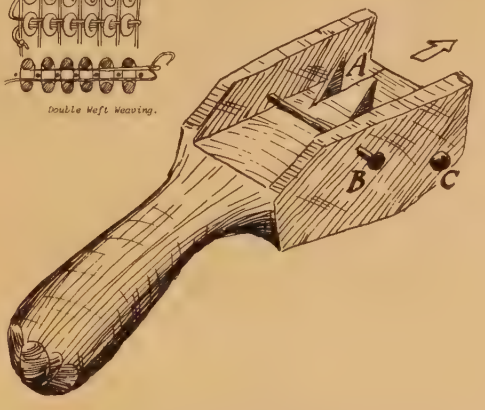
Crafts of the North American Indians
(A Craftsman's Manual)
Richard C. Schneider
1972; 325pp.
$6.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth



One last caution: I treat rather delicately the matter of artifacts which carry overtones of religious and spiritual significance such as drums, pipes, masks, and the like. While such projects may have interest to today's craftsman, the history of their use is such that one must question the validity of reproducing these today without a thorough and sympathetic understanding of their place. I do have strong reservations about the possible degeneration, for instance, for masks which may end up in Hallowe'en costumes.



Shaping a handle hinge.

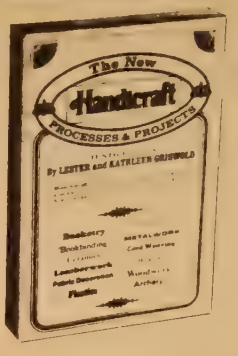


For splint basketry. Two-bladed ripping tool or splitter. Splint is pulled through in direction of arrow. Width inside groove: 1-1/2 inches. A, Pointed knife blades. B, Removable nail for pressure. C, Clamping screw for blades.

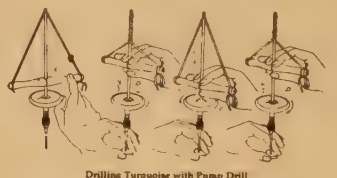
The New Handicraft

To be a good craftsman one needs the experience and the knowledge of a variety of techniques and crafts: the experience, to judge which techniques are best, and the knowledge of many crafts, to draw upon for ideas. Creativity is the combination of old ideas in a novel fashion, much more than it is the discovering of new ideas. This book by the Griswolds is a primer you would expect from people who have learned about crafts from doing them as well as from observing the craft styles of other people and its content has been refined over the years. Chapter one contains instructions for good design; chapters two to twelve cover quite thoroughly a variety of crafts, including bookbinding, ceramics, metalwork, and leather work. Chapter 12 concludes with a list of references that can be used to enlarge the information base of the crafts explained in the preceding chapters. This is a comprehensive reference work that succeeds in meeting the needs of the novice as well as the experienced craftsman & crafts teacher.

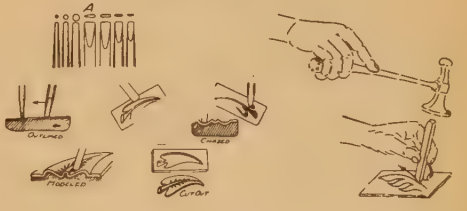
—Dorothy Atkins



The New Handicraft
(10th Edition, Processes & Projects)
Lester & Kathleen Griswold
1969; 462pp.
$4.95 postpaid
from:
Van Nostrand Reinhold Co
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth



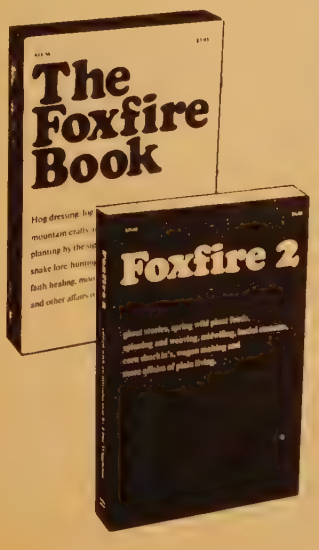
Drilling Turquoise with Pump Drill



The Foxfire Book and Foxfire 2

Choice portions of **Foxfire** *magazine (see Pg. 152) in two volumes:* **The Foxfire Book** *(1968-69 issues) includes everything from hog dressing and log cabin building thru moonshining. Short detours thru recipes and home remedies—— (don't take it all as gospel).* **Foxfire 2** *(1970-72 issues) covers people and their tools and equipment making: wagon wheels, wagons, a footpowered lathe, tub water wheel and spinning & weaving in detail. An amazing collection of folklore, folkways, and fine and funky craftsmanship.*

—DS

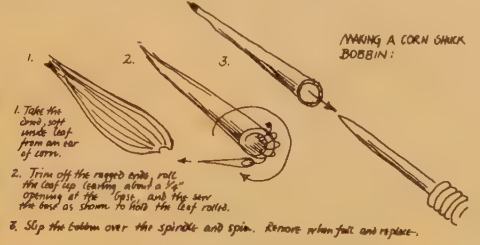


The Foxfire Book
Eliot Wigginton, Ed.
1972; 384pp.
$3.75 postpaid

Foxfire 2
Eliot Wigginton, Ed.
1973; 410pp.
$4.50 postpaid

both from:
Anchor Books
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Lon smooths and trims the backs for his chairs using a drawing knife and a shaving horse. Merle, his brother's grandson, watches.

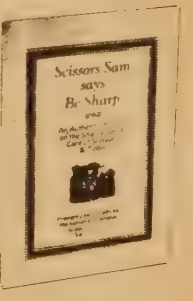


When we asked Aunt Arie if she liked to card and spin, she said, "Ah, yes! I loved it. I'd be up a'settin' an'a' cardin' an'a'spinnin' till one'r'two o'clock in th'mornin'. They'd holler at me, 'Get in that bed!' Spinnin' makes a racket. Oh, Lord, I just loved t'spin. Get that thread up there. Have y'ever seen anybody spin? It's th'prettiest work, ain't it? Turn that wheel, run that thread up. I always had t'run it on a shuck. Put a shuck on th'spindle. Oh, I wish I could do that now. I loved t'do that."

Scissors Sam Says Be Sharp

Well. . . my scissors may or may not be sharp, but they'll never again be a mystery.

—DS



Scissors Sam says Be Sharp
(An Authentic Manual on the Sharpening & Care of Scissors & Tools)
Sam Long
1972; 52pp.
$1.50 postpaid
from:
Scrimshaw Press
149 9th St.
San Francisco, CA 94103
or Whole Earth

Sometimes scissors have been sharpened so many times they will not meet at the points. This makes cutting to the entire tips impossible. In this case, you will observe a small tip on the inside of the thumb blade where the handles meet.

File enough of the tip of the thumb till the tips meet to your desire. Some scissors have no tip. In this case, I file a little off each handle where they meet. Rarely, but occassionally, after you file the tip off the thumb handle, the handles won't come together completely. You will notice right back of the screw at the shank that the handles are hitting.

Open the handles wide and file a little off at the shank until the handles meet.

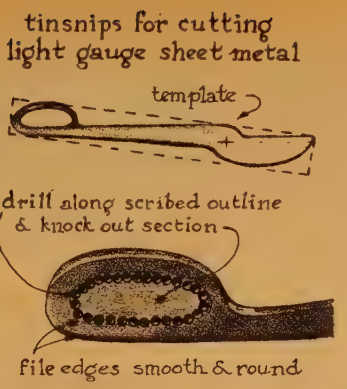
CRAFT

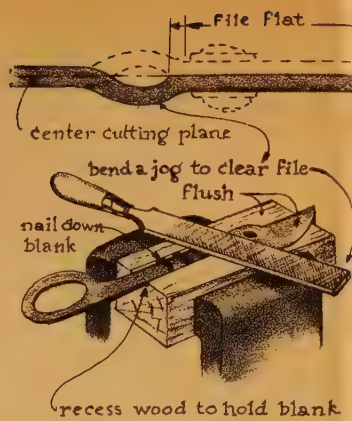
The Making of Tools

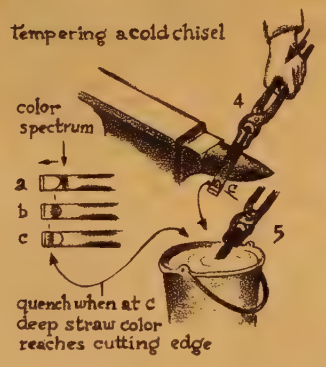
Using tools to make tools is as high a craft and calling as they come. Get your forge, anvil, drill-press, and this wellmade book. Start with screwdrivers. Work up to shears. With the sequel, below, move on to chisels, shovels, and tools of your own invention.

—SB

The Making of Tools
Alexander G. Weygers
1973; 93pp.
$4.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth







Once a student has learned to make his own tools, he will be forever independent of having to buy those not specifically designed for his purpose.

•

Most tools are made of high-carbon steel. This is *temperable* steel. It can be bought cheaply at steel scrapyards and automobile junkyards. And, once you develop an eye for it, great amounts are found strewn along highways and in vacant lots to add to your own scrap pile. No matter how beat-up or rusty a piece of discarded scrap may be, add it to your supply. Scrap is cheap, and as rusty, corroded surfaces are usually only skin-deep, they can easily be ground clean.

•

Files will often remove steel as efficiently as grindstones—— generally as quickly, and with greater control. Don't neglect learning how to file accurately. Make yourself carry out, at least once, the exercises recommended in dealing with hinged tools like tinsnips, shears, pliers, etc. Try to master the filing technique, for it will benefit all you plan to accomplish in toolmaking.

For the serious student, who wants to perfect his filing, write to file manufacturers for their instructive booklets.

When I was a student in Holland, we spent all the shop hours during our whole first year learning only *flat-filing*, so as to achieve machine-like precision. Only after we had acquired that hand skill were we permitted to learn blacksmithing, lathe-turning, drilling, milling, and so forth.

Never walk away from a live fire (forge, torch, or brazier) without a very real awareness of the possible danger. The same holds true for a sharp tool left clamped in a vise.

The sound toolmaker is always in absolute control.

Distractions lead to accidents—— to yourself, to others, and to your tools. Proper care and concentration will go a long way toward toolmaking that is neither hesitant nor mistake-ridden.

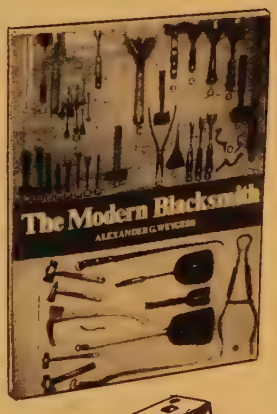
You will sometimes find yourself tempted to whip out a needed, easy-to-make tool that you have lost or mislaid. I have often made a duplicate wrench, screwdriver, hammer, garden tool, rather than spend the time searching for it. The happy result is that wherever I happen to be working—— in the shop, studio, house, or garden——there is always a spare one nearby.

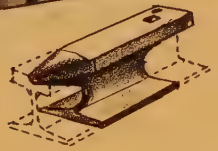
The Modern Blacksmith

If you've ever considered learning the Blacksmith trade, you're no longer safe. If you think that blacksmithing means making horseshoes and little else, you might investigate further. Mr. Weygers beautiful book stresses making your own tools and the clever utilization of scrap metal. Starting with a few wise words concerning attitude, he goes on to explain the possibilities that a skill in blacksmithing opens for the craftsman. He continues with explanations of the tools, shop space, materials and basic techniques. He then clearly shows the more advanced tricks of the trade. (You will discover, with pleasure and satisfaction, that you have become your own teacher), giving a number of useful projects as practice. Every important point is illustrated (by him) with lucid drawings. But the best thing about this book is that it makes you want to go out and Do it. For what better way is there for a craftsman to gain complete control over his work, than to make the tools that he himself must use? This book is unusually well done, and the author's spirit of quiet joy and competence shines through in a way that is rare these days. Now to find a used anvil. . . .

—J. Baldwin

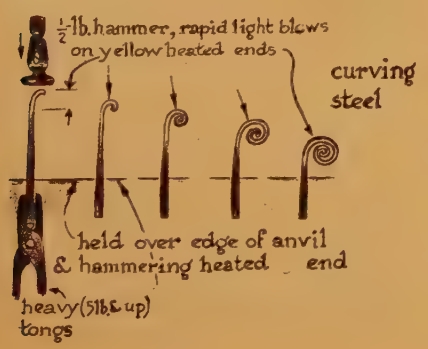
The Modern Blacksmith
Alexander G. Weygers
1974; 96pp.
$4.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

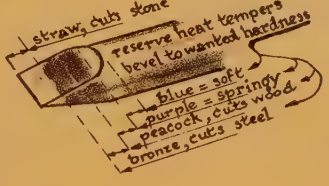


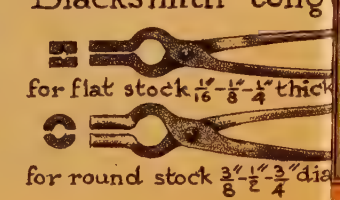


anvil from scrap railroad rail

principles in use of hammer & body motions.







INTRODUCTION TO WOODCARVING TOOLS

by Bruce Erman

Imagine that the camping hike you've planned will be taking you through the famous site of the Fallen Tree-Trunk, where amateurs and professional wood-carvers alike have chipped away and added to an evolving sculpture for over 100 years!

Or, fancy carving an intricate pattern on the door of the main entrance of your own home, ornamenting a head-board for your bed— or even crafting an entire bed itself— posts, canopy, and all!

Whether you plan to spend only an afternoon carving during a camping trek, or devoting entire days to creating at your own workshop, the following information on shapes, sizes, and uses of the many available types of wood-carving tools will undoubtedly prove necessary to your basic selection of equipment.

Shapes, Sizes, and Uses

Wood-carving tools are usually measured across the widest part of the cutting edge (chisels, skews, gouges, fishtails), except parting tools, measured on one side at the cutting-edge. This width is called the "sweep."

A tool's name usually indicates its particular function.

PARTING TOOLS usually have either a 45⁰ or 60⁰ "V" shaped cutting edge. Naturally, the smaller the "V" the narrower the cut. Used for outlining, roughing-out (undercutting), and finishing inside corners.

VEINING TOOLS are the smallest sizes of straight gouges and have narrow but deep "U" shaped cutting edges for grooving and roughing-out small areas or lines.

FLUTERS (firmers) are straight gouges, larger and wider than Veining tools. Whereas the deepest "U" shaped cutting edges are for roughing-out, the flatter the edge, the more the tool is used for smoothing and finishing.

CHISELS have straight cutting edges occurring at 90⁰ to the plane of the shank of the tool; their sweep ranges narrow to wide, and they are used for flat-cutting and finishing, as well as for sharp edges. The Macaroni (box) chisel has the shape of a square-bottomed "U" and is a specialized tool for straight-fluting and flat-cornering.

SKEWS are chisels whose straight cutting edge are ground at about a 45⁰ angle and are excellent for cornering. They are available to skew-left or skew-right, depending on the type of cutting desired; and sweep is similar to straight chisels.

LONG-BENT GOUGES (curved-fluters) correspond to straight gouges given a concave curve along the length of the whole shank of the tool. Available in sweep narrow (veiners) to wide, and used for such purposes as roughing-out or hollowing-out. Long-bent chisels and parting tools are also available.

SPOON GOUGES (short-bent gouges) have a straight shank with a concave "spoon-shaped" crook, or bend, at the cutting-end. The sweep may vary from narrow to wide, and from that of a parting tool to a veiner, straight gouge, chisel, or skew. Spoon gouges reach into roughed-out areas and hollows for the purpose of smoothing.

BACK-BENT GOUGES (short—) are like spoon gouges but have convex-shaped curves bending backward from the shank. Sweeps available from narrow to wide and also in chisel-form. Back-bent gouges are useful in clearing undersides and for making abrupt down-turns.

FISH-TAIL GOUGES resemble the posterior—, or tail-fin, of a fish. Available also as a chisel, and in sweep narrow to extremely wide, the latter size known as a "Swiss pattern-maker" tool. Without interfering with nearby edges, this tool provides clean cuts in tight or sharp corners and may also serve somewhat like a straight gouge. Also available in chisel form.

In general, sizes of tools, stamped-in on the shank or handles, give the radius of curvature. Tools of the same series or style number, although available in various sweeps, all possess the same radius of curvature: i.e., no. 4— 1/8"; no. 4— 5/16"; no. 4— 7/8"; no. 4— ½"— all curve to the same degree.

Thus, tools of flat— or lesser curvature have low size-numbers and make shallow cuts (finishing tools), while tools of greater curvature have higher size-numbers and make deeper cuts.

Choosing Tools

It is difficult for one to manufacture his/her own wood-carving tools. Therefore, it is often recommended that students, beginners, and elementary wood-carvers begin with "amateur" tools, which have shorter-length shanks than "professional" tools, supposedly making them easier to handle. These tools usually come in sets which are prepared with a basic and practical selection of straight chisels and gouges, accompanied by one or several parting tools, skews, long- or short-bent gouges, and spoon gouge. Mallet and sharpening stones usually are extra.

Professional tools, with longer shanks, allow more work to be accomplished at once. But usually, the sizes and sweeps of professional-length and amateur-length tools are identical.

Tools are variously honed and/or sharpened, depending on the specific make. Most often, the blades and shanks of the tools are full-finished clean and smooth.

Handles are usually of wood but are available in a number of styles: round; octagonal; squared, with angled-edges; handles with single- and double-hoops: usually a brass ring ferrule at one or both ends, to give added strength; plastic-ended handles, for added strength; leather-capped handles (again, for added strength); and plastic or rubberoid handles.

Angled-handles help keep tools from rolling, and the various types of special ends help the tool give extra wear by taking extra pressure.

Tools should be sharpened frequently.

The Mallet

Mallets are available in various types of construction, wood, and weight. Although lignum vitae is the heaviest, most popular of the hardwoods, several other types of hardwood mallets are available: Maple, Hickory, Boxwood, and Beachwood.

Mallets are usually hand-turned, and balanced. Many are solid-body construction, but some have separate, wedge-set handles. Mallets will be found available measured by the inch in diameter at the broadest end, by the ounce-weight, or by both. For example, a 2¼" Boxwood; a 1 lb. 9 oz. Lignum Vitae; a 16 oz. —3" White Hickory; a 15 oz. —3½" English Beechwood; a 24 oz. —4" Maple.

Some mallets are manufactured of carefully chosen dense wood cores which are laminated together and then lathe-turned, to assure a density of volume.

Smaller, lighter mallets are recommended for beginners, but the experienced wood-carver will probably have several mallets of varying weight and wood.

With this bit of introduction, more-and-more camping trails should begin to have sculptured trail-markers; more homes should abound with lovely, well-ornamented portals; and more-and-more amateur and professional wood-carvers will be getting a good night's sleep in beds they've crafted with their own two hands.

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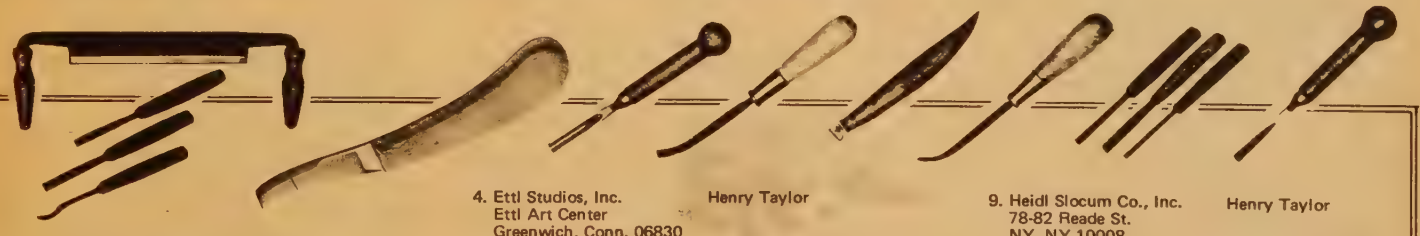
Written by
Bruce Erman
January 1974
c/o Dirty Rainbow
Artists' Materials
2514 Durant Ave.
Berkeley, Ca. 94704



MAIL-ORDER SOURCES

NAME & ADDRESS	BRAND NAME
1. Art Consultants 100 E. 7th St. NY, NY 10009	David Strassman
2. Buck Brothers, Inc. Millbury, Mass. 01527	Buck
3. Dirty Rainbow Artists' Materials 2514 Durant Ave. Berkeley, Ca., 94704	Marples King (Sculpture House) Sculpture Associates
4. Ettl Studios, Inc. Ettl Art Center Greenwich, Conn. 06830	Henry Taylor
5. Frank Mittermeier, Inc. 3577 E. Tremont Ave. Bronx, NY., 10465	David Strassman
6. Sculpture Associates, Ltd. 114 East 25th St. NY, NY 10010	Sculpture Associates
7. Sculpture House, Inc. 38 East 30th St. NY, NY 10016	King
8. Sculpture Services, Inc. 9 East 19th St. NY, NY 10003	David Strassman
9. Heidl Slocum Co., Inc. 78-82 Reade St. NY, NY 10008	Henry Taylor
10. Stewart Clay Co. 133 Mulberry St. NY, NY 10013	Henry Taylor & domestic
11. Woodcraft Supply Co. 313 Montvale Ave. Woburn, Mass. 01801	Sorby Marples
12. Jack D. Wolfe Co. 724-734 Meeker Ave. Brooklyn, NY 11222	King

Brendan's Leather Book

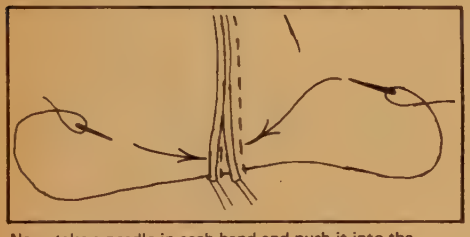
Brendan's yankee practicality will launch you into heavier leathers, belts, bags, sandals. His chatter's funny. His information on basics is often excellent, as in sections on buying cowhide, setting up a workshop, dyeing leather well (mixing, thinning and correcting mistakes). He even shows how to put that razor edge on a knife that'll have you cutting leather like cheese. Be aware that his price quotes are from 1972. Since leather workers have been such a close-mouthed lot, it's a pleasure to see his obviously hardwon design ideas and shortcuts so generously shared.

–DS

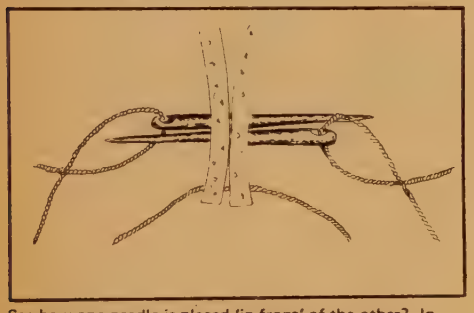
Brendan's Leather Book
Brendan Smith
1972; 163 pp.
$3.50 postpaid
from:
Outer Straubville Press
P.O. Box 612
Cotati, CA 94928
or Whole Earth

The Saddler's Stitch

For sewing thick leather, unroll a length of thread 3-1/2 times the length of your seam. Be generous. There is nothing more annoying than running out of thread in mid-seam. You can become more exact with practice. Now thread a needle onto each end of the thread. That's right, each end. Take the leather you're going to be sewing and hold it, seam up, between your knees. Find your first hole; it should be nearest your body. Shove one of the needles through and pull until you have an equal amount of thread on both sides, like this:



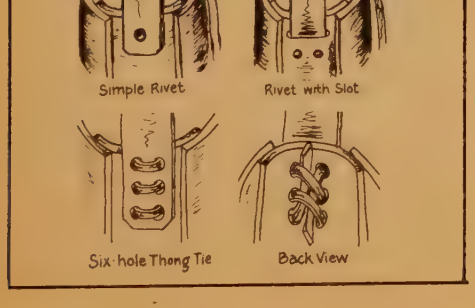
Now, take a needle in each hand and push it into the next hole away from your body. *Don't* cross over the top of the seam, just follow them dotted lines. A close-up at this time would look like this:



See how one needle is placed 'in front' of the other? In this case it's the one on the left. Well, if you start with that left hand needle in front, all the other stitches should be the same way—— that is, the left hand needle should always be in front. It doesn't matter which side you choose, just as long as you stick to it. Your sewing will be ragged and uneven if you aren't consistent.

•

Note: Most of these techniques go best on gusseted bags that have either concave or turned seam arrangements.



Leather

A very strong rich book, filled with the sensuous ancient magic of finely-crafted leather. Using the photo sequences of the 32 steps in dyeing and finishing a belt (No, it's not just a cut and dyed strip of leather.) a middlin' novice can learn to transform a piece of hide into burnished, shimmering beauty. The only better instruction is a fine craftsman friend correcting each stage ("No, bear down harder, that's only a surface 'polish,' or 'What do you mean 'beveled'? You only scraped the edges!"). It takes patience, attention to detail, and hard work.

Wish it told every aspect of leather working as well as it does these:

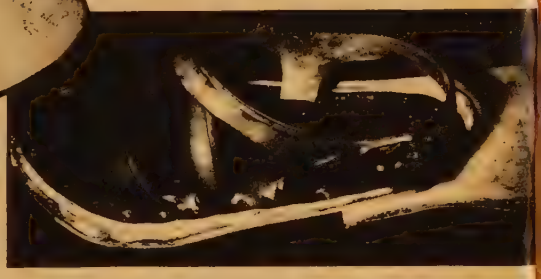
Sandalmaking - 42 photos of the process from making the tracing thru cutting, fitting, sanding, cobbling and finishing the edges. All the tips of master-crafting are there.
Designing and fitting a muslin vest pattern - 20 steps photographed and explained.
Hat construction - less thorough but still excellent chapter on wet-forming and finishing.

–DS

Leather
Donald Willcox and Jim Manning
1972; 229 pp., 500 photographs
$14.95 postpaid
from:
Henry Regnery Company
114 W. Illinois St.
Chicago, IL 60610
or Whole Earth

All top sole strap holes that appear on the outside circumference are slightly slanted.

Two nails hold each strap end in place, and strap ends are sharply beveled to reduce strap bulk.



One method of attatching a heel is to cut it extra large, cobble it with the top and bottom soles, and then trim it to correct size afterwards.

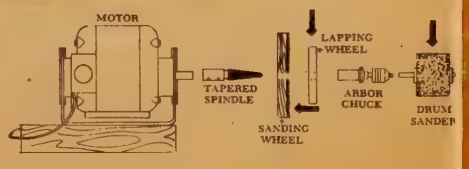
The Leathercraft Book

For bags and garments in softer leathers. Pat Hill's book demystifies rather than excites: text and line drawings are carefully distilled and information-packed, step-by-step instructions which are graded according to difficulty lead you around ordinary beginner's pitfalls, directory of suppliers is good.

–DS

If your machine does not move smoothly along the suede or leather, try putting a sheet of tissue paper *under* the leather where it touches the machine. Sew right through the paper, which is easily ripped off after sewing. If that doesn't work, take each piece that is to be stitched and run it through the machine without thread. Then, line up the two pieces and hand-stitch them together through the holes you've punched with the sewing machine.

The Leathercraft Book
Pat Hills and Joan Wiener
1973; 132 pp.
$3.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth



Cream Rises
LEATHER

Brendan's Leather Book *Best introduction* 550
Leather *Craftsmanship!* 550
Encyclopedia of Rawhide & Leather Braiding *Believe the title* 551
(Leather Braiding 176 *and* How to Make Cowboy Horse Gear 176 *are excerpts from the Encyclopedia.)*
Whips and Whipmaking *Ultimate leather braiding* 551

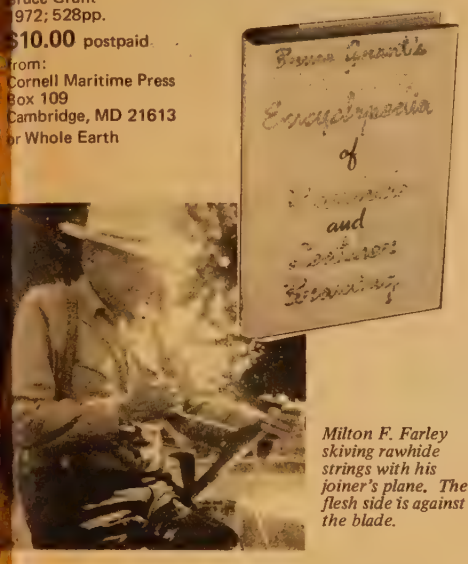
Encyclopedia of Rawhide and Leather Braiding

A major reference work—— undisputedly excellent. Its main drawback is FRUSTRATION. No one wants to start simply and learn slowly, when right there's this 5-part Inside Trick Braid. ". . . .Uh, well, . . .it looked so logical and easy!"

But in case you've secretly hankered to try a bola, attach a stone to a hatchet handle, or do any of a thousand other fancy braids, buttons, knots, applique facings, suspenders, whips, dogcollars and horse gear. . . You know where to go.

—DS

Encyclopedia of Rawhide and Leather Braiding
Bruce Grant
1972; 528pp.
$10.00 postpaid
from:
Cornell Maritime Press
Box 109
Cambridge, MD 21613
or Whole Earth



Milton F. Farley skiving rawhide strings with his joiner's plane. The flesh side is against the blade.

Milton F. Farley, an old-time buckaroo of Crawfordsville, Oregon, wrote me recently that, after years of trying to find some easy and satisfactory method of thinning and evening rawhide strings, he had learned from an old fellow how to skive them by a very simple and homey way.

"Now, here's what I want you to do," he wrote. "Go to a hardware store and tell the salesman you want a good joiner's plane. When you get it in your hands it explains itself. You turn the screw behind the bit clockwise to close the gap behind the bit. When you turn the screw anticlockwise it opens the gap. If the strings are one inch or smaller I hold the plane in my left hand, pull the string with my right. When the strings are wider, I fasten the plane in a vise. Darn it, Bruce, it's so simple it's silly!"

•

Thirteen-Thong Braid. This and the braid to follow are the most beautiful of the flat braids. The key to both may be found in the braid of six thongs in Plate 30. Always remember to alternate over and under on each side; for instance, when the thongs are passed *over* on one side, they are passed *under* on this side the next time.

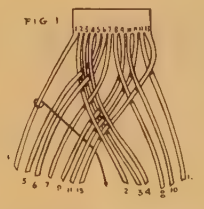
Divide the thongs seven on the left and six on the right. As each thong is worked from the outside, it comes only to the center.

Begin with thong 4 and pass it to the right over thongs 5 and 6, and under 7. Then pass thong 9 to the left under 8 and 4. Take thong 3 to the right over 5 and under 6, 7 and 9. Bring thong 11 on the right to the left under 10, 8 and 4, and over 3. Pass thong 2 on the left to the right under 5 and 6, and over 7, 9 and 11. Bring the extreme right-hand thong 13, to the left over 12, under 10, over 8, under 4, over 3 and under 2.

This preliminary, which appears somewhat intricate, is not absolutely necessary, but it closes the braid at the top so there is no loss of leather.

Now, take strand 1 on the extreme left and pass it over 5, 6 and 7, and under 9, 11 and 13.

On the right, take thong 12 and bring it to the left under 10, 8 and 4, and over 3, 2 and 1. The extreme left-hand thong is now No. 5. Previously the extreme left-hand thong No. 1, was passed *over* the three nearest it. Now alternate——and this is the secret of the double braid—— by passing it *under* the three nearest—— that is, 6, 7, and 9, and *over* 11, 13 and 12. On the extreme right, bring the outer thong, No. 10, to the left center by passing it *over* (the one before on this side wend *under*) 8, 4 and 3, and *under* 2, 1 and 5.



On the left, pass over three and under three to the right center. On the right, pass under three and over three to the center. The braid is consistent from now on. Remember to alternate the passes on each side. Keep the braid snug and the thongs in order.

By placing the thongs in a drawer and closing it on them at the beginning, they can be kept side by side. If necessary, use paper clips and small pieces of paper and attach each number to the thong.

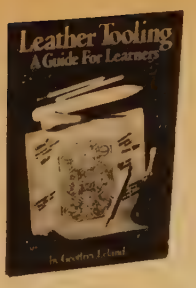
Leather Tooling

This small book, first printed in the 19th c., gives clear instructions for all the European and North African techniques of decorating leather that have been developed over the centuries such as: outlining the design and matting the ground; molding the leather into low relief; blind tooling (first done by the Copts in the 6th c. AD); cut-leather or "cuir cisele" (a 14th and 15th c. Austrian-German technique); pressing softened leather into raised or sunken molds or "cuir bouilli" (14th and 15th c. Italian); and gilding (introduced by the Moors from Morocco into Spain and Italy in the late 15th c. and from there into the rest of Europe).

Leland stresses the importance of original design and excellence of craftsmanship. He believes that anyone who learns this can always make a living.

—Betty Lou Beck

There are various ingenious ways of bringing out relief in outline. The chief is, of course, to mark the outline deeply and bring the edge of the matt or the stamp, be it large or small, well down into the line. Also to slope or incline the leather down, bevelling it just as in wood-carving or repoussé, and then matting it. And as in these arts great care must be exercised to hold the punch or matt perpendicular, so as not to mark on one side; to change its position, so as to avoid uniform checkwork; to press it down when striking, so as to make it give as much mark as possible with one blow, because two will make a blur. A great deal depends on the quality, hardness, and *body* of the leather used. If it has been well tempered or damped, and then properly dried, the working will be all the easier.



Leather Tooling
Geoffrey Leland
1972; 96 pp.
$3.25 postpaid
from:
The Running Press
38 So. 19th St.
Philadelphia, PA 19103
or Whole Earth

Handy Cutter

Fine little "handy"—— much more maneuverable than the Stanley knife. Holds a single-edged razor blade; retracts too. Did you know that industrial blades outlast those packaged jobbies in the drug store, 'specially when cutting curves? Try 'em. (Some people think it's a box cutter, but don't let that fool you.)

—DS

Handy Cutter
$0.69 plus tax & postage (they send invoice)
from:
Pacific Handy Cutter
2454 N. Chico Ave.
South El Monte, CA 91733

Leather Knife

Handles like a champ, no blisters, no drag. It's light, sharpens quickly, holds a razor edge well, skives, cuts curves in sole leather like a whiz——a fine, all purpose leather knife by R. H. Forschner Co. 7½" long with a 2-3/4" blade.

—DS [Suggested by Bruce G.]

Available at local cutlery shops; ask for a paring knife or they will look at you strangely. . . . In a pinch, shops that will mail them:

$3.00 postpaid

from:
Pacific Saw Works
4401 Grove St.
Oakland, CA 94609

Shattuck's of Berkeley
2263 Shattuck Ave.
Berkeley, CA 94704
or Whole Earth

Other

Osborne tools have gone downhill, but they're still better than Tandy. The bag punches ain't what they usta. . . . Don't overlook your older, less known shoe finders for good tools as well.

—DS

Whips and Whipmaking

The Compleat Whip: its history, use, design, construction, repair, and even physics of its action. The only thorough treatment of the subject. It's well-written, funny and packed with practical information on cutting and paring thongs, making a braiding soap, and cracking the finished product. A must for the serious whip enthusiast.

—DS

Whips and Whipmaking
David W. Morgan
1972; 132pp.
$6.00 postpaid
from:
Cornell Maritime Press
Box 109
Cambridge, MD 21613
or Whole Earth

•

There are two basic factors which account for most uses of whips. First, they are a means of striking a controlled blow at a distance from the user, and second they are a means of making a soft or loud and sharp noise. Thus a whip may be used to punish an animal, or to signal by touch or sound, and is a versatile and effective tool in maintaining authority over working animals. Beyond this, the whip may be used to develop spirit or enthusiasm in a team, and as a showy accompaniment to an otherwise drab job.

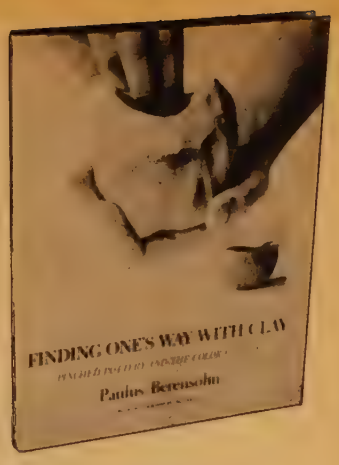
Finding One's Way with Clay

A beautiful book, in every sense, almost a cult book among potters these days, but it deserves its excellent reputation. You can use it in many different ways, depending on your inclinations— either as the path to a new way of experiencing through clay— or simply a book full of information and ideas on pinch pots, coloring clay, and sawdust firing. Berensoln is articulate and sensitive in his writing about his pots, his methods, and himself. His enthusiasm leaps from the page so that you find yourself reaching for the clay before you have time to finish his first exercise, let alone the whole book. One of the best parts of the book for me is the section on sawdust firing. He gives detailed information for building and firing a sawdust kiln along with advice on the type of pots, round and small, that will survive the fire. It can all be done for little expense and fuss in an ordinary urban backyard. A fine book, by all means the most exciting of the many books available on handbuilt pottery even though it is "limited" to pinch pots. (For a wider range of handbuilding methods, I think the best book is still **Making Pottery without a Wheel** *by F. Carlton Ball and Janice Lovoos [Reinhold: New York, 1965] $9.95. This one is a straight manual, illustrating and describing all the usual handbuilding techniques in a clear and attractive format. It has excellent photographs and a good glaze section in the back.)*

—Elina Holst Levy

Cream Rises
CERAMICS

Pioneer Pottery *Earth, systems, technique* 160
Kilns *Broadest* 163
Raku Pottery *Best on raku* 553
Clay and Glazes for the Potter *Best overall* 162
Finding One's Way with Clay *Sensuous* 552
Ceramics Science for the Potter *You need to be a chemist* 554
Ceramics: A Potter's Handbook *Introductory* 160
The Kiln Book *Fills Kilns' gaps* 554
Ceramic Formulas *Technical* 553
Making Pottery Without a Wheel *General handbuilt* 552



Finding One's Way with Clay
Paulus Berensohn
1972; 159pp.
$9.95 postpaid
from:
Simon and Schuster
One West 39th St.
New York, NY 10018
Attn. Order Dept.
or Whole Earth

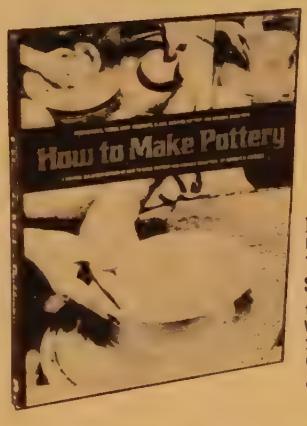
The finished pot will show your finger marks. Because they are your fingers the pot will have a unique texture and you will probably want the marks to remain. There may be a network of fine or strong cracks on the surface caused by the strong pressure of the thumb pressing the clay out from the inside. This texture, too, you may find pleasing and natural and earthlike, like the shells of some nuts. Should you want the outer walls of the pot clean and uncomplicated you can scrape off the finger marks and texture with a flexible spring steel scraping tool when the pot is at the leather-hard stage or just past it. If the clay has heavy grog the scraping will pull at the grog and make an even but scratchy surface. You can either leave this or use sandpaper, when the pot is totally dry, to smooth it over. You can add texture by using very coarse sandpaper that will scratch many small lines, like crosshatching on the surface. After bisquing you can glaze the outside or just the inside, leaving the outside to show the clay and the texture. You can use engobes or slips and paint on the walls of the pot as if it were a canvas waiting for an image or a brush stroke. You could write a letter on its surface or tell a picture story or make designs.

How to Make Pottery

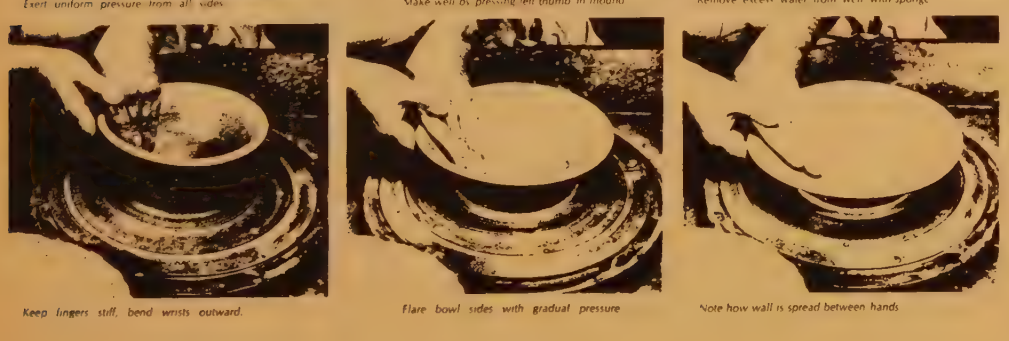
A good book for the beginning and intermediate potter. It deals with all the major aspects and approaches to ceramics: the clay, the pinch, coil and slab methods, and ceramic sculpture. The methods have step-by-step photographic illustrations, as well as interesting and delightful examples of contemporary finished products by different artists. The chapter about decorative processes in which glaze making experiments are described is especially valuable if you are interested in developing a knowledge about glazes without having to worry about complicated chemistry; there are also several glaze recipes at different firing temperatures. Casting methods, firing of the kiln, a very brief section about how to build a potter's wheel, and a bibliography and list of suppliers are other assets.

The chapter on wheel throwing will make a good potter of anybody.

—Karin Kanafani



How to Make Pottery
Herbert H. Sanders
1974; 140pp.
$10.50 postpaid
from:
Watson-Guptil Publishers
2160 Patterson St.
Cincinnatti, OH 45214
or Whole Earth



Potworks

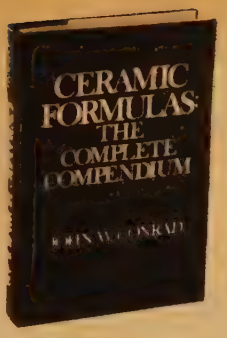
Not a first book of clay. It is THE book of clay. The essen of clay, glazes, scavenging for materials, setting up studio, buying, building wheels, kilns, suppliers lists, booklist (for pottery books you won't need after this one), and answers questions you'd never think to ask. Love & commitment t clay for beginning potter, craftsperson, potter with or with wheel, with or without money. A potter's BIBLE!

—Ildi Holdstock

Potworks
(A First Book of Clay)
Billie Luisi
1973; 154 pp.
$2.45 postpaid
from:
William Morrow & Co., Inc.
Wilmor Warehouse
6 Henderson Dr.
West Caldwell, NJ 07006
or Whole Earth

You can usually find a way of digging your own clay witho being an owner of country property. If you have access to clay source, try it out. Dig out a sample batch of the clay, about ten pounds or so. Test it for plasticity by rolling coi and tying the coils, ring fashion, around your fingers. If th clay does not crack at the edges, it is plastic. Test for its firing range by drying it to your preferred workability stat Roll out some slabs and make a few small vessels. From th slabs, cut out some tiles. Measure the slab tiles before they dry, after they've dried to the bone-dry state, and the after bisque firing. These comparative measurements will tell you how much your clay shrinks. Measure the top and bottom diameters of the small pots you've made. Your fir test firing should bring the pieces to your normal bisque temperature, somewhere in the cone 010 to cone 07 range. If the pieces show the qualities of bisque ware— porosity softness, paleness of color, immaturity of sound when struck— assume the clay is bisqued. Put the pieces on unglazed flat tiles of your normal clay, and fire them up to your usual or projected glazing temperature. The small, flat tiles are a protective device. Should your unknown clay turn out to be a low-temperature clay, it may deform or begin to melt at a high firing temperature. In order to avoid a mess all over your kiln, the stuff is placed on a control tile. If you fire some unknown, low-temperature surface clay up to cone 8 or 9, it may turn out to be a natural slip clay glaze, not a clay body up at those temperatures. If you are in an area such as the region arou Albany, N.Y., you may come up with a number of finds th might even include a natural stoneware clay, a potential sli glaze, as well as a usable surface clay. If your clay sample out encouragingly, you can dig more. Clean it of any un- pleasant junk, sharp stones, etc., knead in some grog, and t it.

Ceramic Formulas



Ceramic Formulas: the Complete Compendium
(A Guide to Clay, Glaze, Enamel, Glass, and Their Colors)
John W. Conrad
1973; 309pp.
$10.95 postpaid
from:
MacMillan Pub. Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

I'm not sure it's the COMPLETE compendium, but there are certainly enough clay and glaze recipes in this book to keep any ordinary potter going full speed for a lifetime. Conrad has collected, tested, and organized into cone groups some 150 clay bodies, engobes, clay body colorants, and stains and almost 500 glaze formulas. There is a color chart with 160 different colors and most of the glaze recipes are keyed to one (or more) of the colors on the chart. For each glaze formula, he has included an indication of surface quality, opacity, color, and special effects. I have worked with a number of the glazes in the cone 9 range and have gotten good results which, for the most part, match the characteristics he lists. A few things I miss having in the book: there isn't enough text or discussion; I also wish there were an index and a cross reference with the color chart. But, on the whole, this is a useful book with more guidance as to expected results than is generally available in pottery books.

Two other good books are available for people interested in more fundamental and independent work with glazes. One is **Glaze Calculation** *by S.A. Goldberg (Billiken Press, P.O. Box 8564, San Jose, CA, 1972), price $4.45, a workbook aimed at teaching the basic information about glaze formulation and testing. The second is an advanced text for people who already know a considerable amount on the whole subject of glaze formulation and chemistry:* **Ceramic Glazes** *by Cullen W. Parmelee as revised by Cameron G. Harmon (Cahners Books, 89 Franklin St., Boston, MA 02110, 1973, price $14.95.)*

—Elina Holst Levy

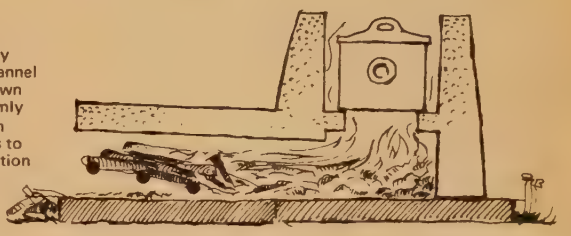
Pottery: Raku Technique

If you're trying raku for the first time, or if you're just curious to know something about it, this is the book to buy first. It has all the technical information you'll need to begin with, and later, if you want to go further, then you should buy the Piepenburg book too. Lynggaard pays his respects to the Japanese tradition, but his emphasis is on the practical, and, though concise, he manages to include everything necessary. He tells you how to mix the clay body, makes some suggestions about raku shapes and forms, gives a few glazes and tips on glazing, and then goes into considerable detail about building several kinds of raku kilns. The final section describes the firing process, and includes tips about different ways of reducing the fired pots. The tone throughout is informal and pleasant to read; the photographs and drawings are good accompaniments to the text. All in all, an excellent book.

—Elina Holst Levy

Pottery: Raku Technique
Finn Lynggaard
1973; 79pp.
$2.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45002
or Whole Earth

The traditional raku kiln can be built of moler or fireclay bricks. To support the arched structure of the firing channel a framework of cardboard or veneer is used which is drawn out through the opening in front once the bricks are firmly in place. Finally a layer of mortar is spread over the kiln which, if it is mixed with a little cement, not only serves to give the rounded form but also provides a certain protection against wind and weather.

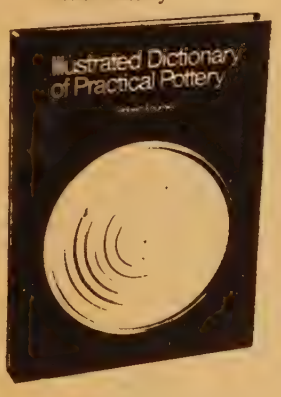


Illustrated Dictionary of Practical Pottery

The dictionary is a quick reference for the potter to subjects seldom discussed in pottery books, a good example being the Harkort test for testing the tendency of a glaze to craze. There are excellent photographs accompanying the text, a bibliography and a short list of catalogs from ceramics companies. Also a list of films related to ceramics. Without fighting the beginner who needs to know basic definitions, Fournier manages to satisfy on several levels. Thanks to this, it should be a useful and valuable reference tool for many years (perhaps helping to rationalize its cost!).

—Karin Kanafani

Illustrated Dictionary of Practical Pottery
Robert Fournier
1973; 254 pp.
$12.50 postpaid
from:
Van Nostrand Reinhold
Order Dept.
300 Pike St.
Cincinnati, OH 45002
or Whole Earth



Feathering

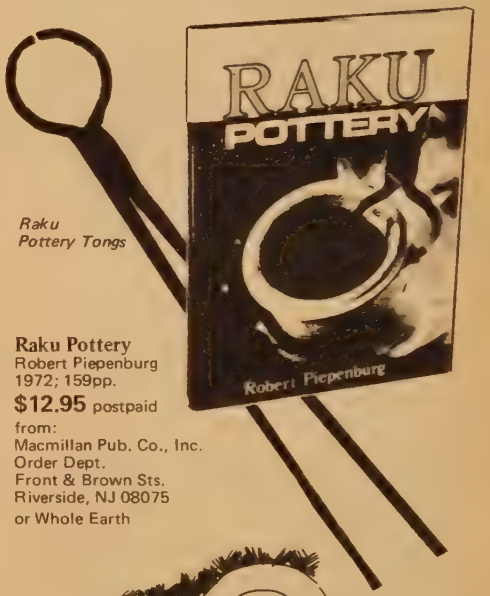
A type of decoration in which *trailed* lines and dots of *slip* are drawn out by means of a thin and preferably pliable tool, such as the center rib of a feather. If the tool is drawn in alternate directions an overall pattern develops. The technique should be used with discretion—design values can be lost in an excess of random feathering. With skill, a number of variations can be developed—curved lines, or a quick flick at the end of a stroke, for instance. Often combined with design trailing, e.g., for delineating a bird's beak or fish tails.

Both the base slip and the trailed line must be wet and fluid. One should avoid cutting into the clay beneath. Use the feather fairly upright; if its length is dragged through the slip, a dead and muddy line will result. Turn the dish to reverse the line direction. Feathering on upright or convex surfaces, as done on seventeenth century beakers, for instance, needs considerable skill.

Raku Pottery

I find Piepenburg's book to be an absolute delight, both as a manual for raku and as a book just to sit and enjoy. It looks like a picture book, but when you start reading, you realize that it contains an impressive amount of practical information as well. Divided roughly into two sections, the first chapters deal with the history of raku and a description of the tea ceremony, the best, most complete and interesting treatment of this subject that I've seen. The rest of the book is more a manual: very useful and comprehensive chapters on clay types, on the experience of doing raku, on glazing, building kilns, and firing methods. He has included illustrations showing various stages in the raku process, such as glazing and firing plus detailed photos and drawings of kilns and kiln building—excellent for those interested in building their own. There are also many photographs of pots, traditional and modern, a number of them done by his students. The pots he has included interested and stimulated me—in fact the entire book made me yearn to do more raku right away. What more could a potter want from a book? The price is high, but for a change it is worth every penny. Everything in this book is just a little better, more comprehensive, more generous than others in its area. The others are good, but Piepenburg's is best: highly recommended.

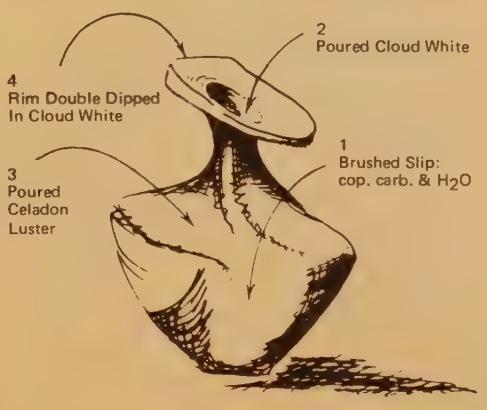
—Elina Holst Levy



Raku Pottery Tongs

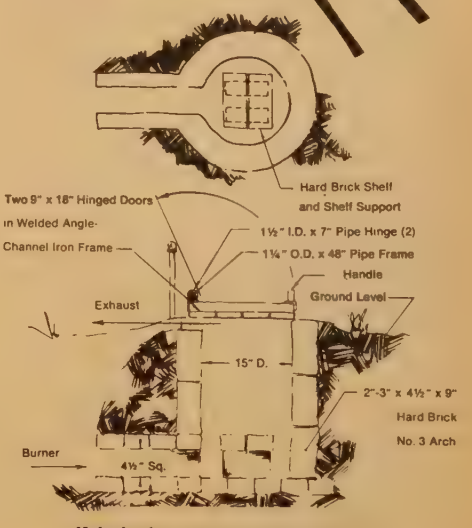
Raku Pottery
Robert Piepenburg
1972; 159pp.
$12.95 postpaid
from:
Macmillan Pub. Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

Sample sketch, as might be found in a glazing notebook, showing glazes used.



Piepenburg Cloud White
75 Colemanite
25 Feldspar

A-Celadon Luster
5 Manganese Dioxide
3 Copper Carbonate



Kulasiewicz's Ground Level Raku Kiln

CRAFT

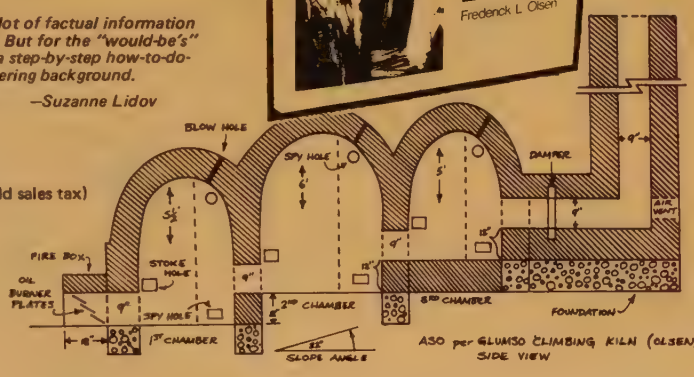
The Kiln Book

This is a useful addition to the small number of books on kilns and their making. It fills in some of the gaps left by Rhodes in his book, **Kilns: Design, Construction, and Operation** *(Pg. 161). Specifically, the chapter on fuels gives more complete information on how to calculate and meet your gas needs. The reader should be wary of Olsen's gas requirements which he admits are low and which seem to me unrealistic.*

The book is technical and contains a lot of factual information for the already-initiated kiln builder. But for the "would-be's" it is not encouraging. Still needed is a step-by-step how-to-do-it book for the potter with no engineering background.

—Suzanne Lidov

The Kiln Book
Frederick L. Olsen
1973; 146pp.
$8.95 postpaid. (Calif. residents add sales tax)
from:
Keramos Books
Westwood Ceramic Supply
14400 Lomitas Ave.
City of Industry, CA 91744
or Whole Earth



Ceramics Periodicals

Ceramics Monthly *A very readable, perusable, useable monthly on pottery. Over a stretch of about four years, the magazine seems to have tuned in to the "crafts' revolution" and is more and more a to-be-taken-seriously publication. Its articles are a good mix of how-to- technical presentations, photo essays on working potters, information about glazes, and a good questions and answer section. The Letters column is a lively battle between the functional and the funky. The ads are a good way of keeping up with new books, supplies, workshops, and shows. Some recent examples of articles:*

"Cone 6 Oxidation Glazes"
"A Japanese Potter in America"
"Foot Rims, Part III"
"Michael Cardew: A View of African Pottery"
"Marketing Your Pottery"

Published monthly except July and August. Subscriptions: one year $6. Address Ceramics Monthly, Box 4548, Columbus, Ohio 43212.

—Elina Holst Levy

Besides **Ceramics Monthly & Craft Horizons,** *which everyone knows about:* **Studio Potter,** *a nice middle ground for the serious potter: $5.00 year from Studio Potter, Box 172, Warner, N.H. 03278: Excellent.*

Ceramic Review; *publication of the Craftsmen Potters Association of Great Britain. 1 year for £2.50 (Pounds: about $6: check exchange rate) from Ceramic Review, 5 Belsize Lane, London NW 3 5AD. A very fresh look at a whole different approach to pottery & studio practice. Excellent.*

Craft/Artisanales Dimensions: *Published by Canadian Guild of Crafts Ontario, 29 Prince Arthur Avenue, Toronto, Ontario, Canada M5R 1B2, $10.00 per year (Bi-monthly). A look at the Canadian scene.*

There is also a New Zealand Potters' Magazine, but I don't have the info.

—Bruce McDougal

Ceramic Science for the Potter

Analysis of the "whys" for the chemist-potter.

—DS

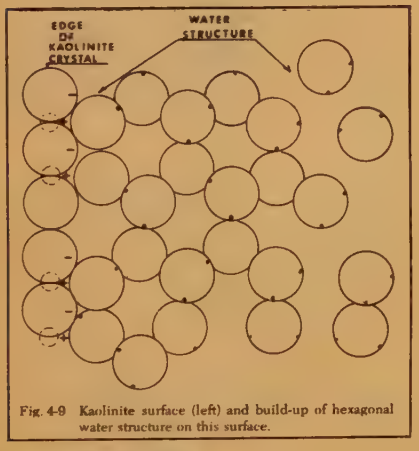
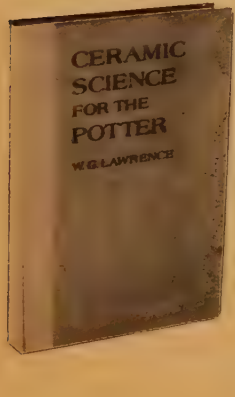


Fig. 4-9 Kaolinite surface (left) and build-up of hexagonal water structure on this surface.



Ceramic Science for the Potter
W. G. Lawrence
1972; 239pp.
$10.95 postpaid
from:
Chilton Book Co.
Attn: Customer Service Dept.
Chilton Way
Radnor, PA 19089
or Whole Earth

Big Creek Pottery Wheel - Plans

This is a good way to get yourself a fine wheel at a low price—if you are willing to put some time and energy into the project by building it yourself. With the soaring prices of good ready-made wheels, and kits too, this build-your-own approach makes better and better sense. The prototype for this wheel is excellent: I used one for six weeks at a recent Big Creek workshop and can report all good things about it. The design is good, the construction is simple and solid, it is comfortable to use, easy to clean: in short, it works well. It should be fairly easy to put together, and, if you follow the directions right and use good quality materials, you should end up with a wheel as good as those at Big Creek.

—Elina Holst Levy

Plans
$2.50 postpaid
from:
Bruce A. McDougal
Big Creek Pottery
Davenport, CA 95017

Ceramic Supplies

More information from Bruce McDougal (Big Creek Pottery, Davenport, CA 95017)—— generous in sharing of his know-how, from our experience and others!

Most of the listings from the **Last Catalog** are still OK. Ch on three of them are:

Thorley Pottery Supply
1183 Industrial Avenue
South Gate, CA 90280

Kiln shelves & stilts. An excellent source for fired clay she in large sizes that will take cone 10-11 reduction firing wit trouble at about 1/3 the cost of Silicon Carbide. Price bre for orders of 25 shelves at a time. They aren't set up to h orders for 1 or 2 shelves at a time, so get together & order bunch. Catalog (free). **Pg. 163.**

Denver Fire Clay is defunct. (Denver Fire Clay now sold b Kaiser). **Pg. 163.**

A.D. Alpine Inc.
353 Coral Circle
El Segundo, CA 90245

Kilns, mainly—— also wheels and other ceramic gear. Cata (free). **Pg. 163.**

NEW LISTINGS:

Quyle Kilns
Murphys, CA 95247

A variety of excellent clay bodies. Sold in small quantiti through Leslie & Western. Larger quantities (ton or more sold direct. Catalog (free).

Robert Brent Co.
128 Mill Street
Healdsburg, CA 95448

Wheels, clay, slab rollers. Probably the best power wheel the market: their "C" model is standard, and they go up down from there. Sold direct or through local dealers (se yellow pages). Catalog (free).

Carborundum Company
Refractories & Electronics Division
Keasbey, N.J. 08832

"CARBOFRAX" Silicon Carbide shelves; excellent shelv any use, but the ONLY shelves we know of that are impe to salt & can be used in salt kilns. (Other silicon carbide shelves are NOT, they bubble & melt and clay shelves so collapse.) Note: This has to do with the BINDER used the manufacture of the S_1CO_3 shelves.

Industrial Minerals Co.
1057 Commercial Street
San Carlos, CA 94070

Clay bodies & clay materials.

GLEANED FROM PEOPLE WHO SHOULD KNOW: MIDWEST, EAST & NEW ENGLAND.

Newton Pottery Supply
96 Rumford Ave.
W. Newton, MA 02165

Equipment, supplies, clay.

Rare Earth Mudworks
70 Merrimac Street
Amesbury, MA 01913

Clay & Equipment

New England Ceramics & Kiln Supply
Shelter Rock Rd.
Danbury, CT 06810

Clay, materials, kilns, equipt.

Clay Art Center
40 Beach St.
Port Chester, NY 10573

Equipt. & Clay.

Hammill & Gillespie
Box 104
Livingston, NJ 07039

Clay, materials.

Ceramic Color & Chemical
Box 297
Brighton, PA 15066

Colorants & oxides

Stewart Clay Co.
133 Mulberry St.
New York, NY 10013

Clay, material, equipt.

Minnesota Clay Co.
8001 Grand Ave So.
Bloomington, MI 55420

Clay, materials, equipt. Highly recommended: "They c

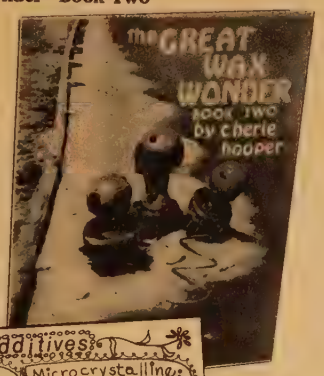
Also recommended for sources of all kinds of stuff: the **Ceramic Data Book**, published annually by Cahners Publ Co., 5 South Wabash Ave., Chicago, IL 60603. Listing sources for every conceivable ceramic product you can t

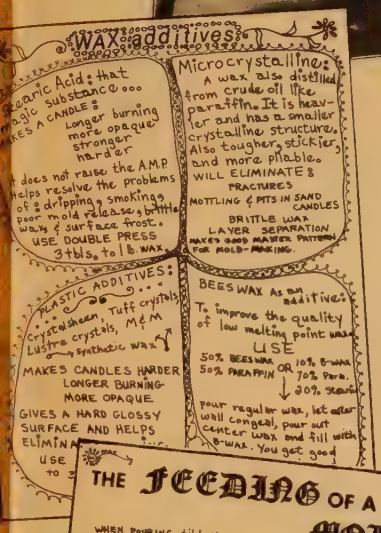
The Great Wax Wonder - Book Two

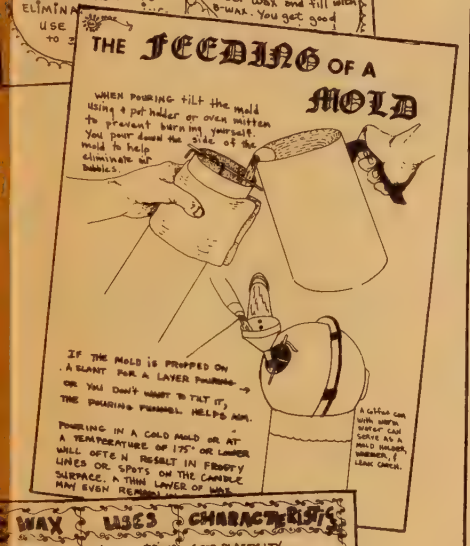
Candles coming alive! Abounds with information about every aspect of candlemaking and its history. Written in a warm, chatty style with drawings and, of vivid photographs on every page. Well worth the extra time needed to read the many varied irregular scripts. Contains a good number of sources for materials.

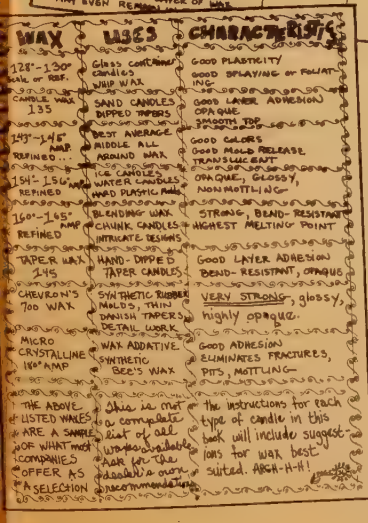
—Barbara Erfani

The Great Wax Wonder - Book Two
Cherie Hooper
1972; 148pp.
$2.25 postpaid
from:
Hidden House Press
El Encina
Palo Alto, CA 94301
or Whole Earth









Getting Started in Candlemaking

Does just what the title promises: no frills, just basic candle making, with inexpensive equipment. It's easy to follow the straight forward instructions with numerous fine illustrations. The author presents a wide range of simple candles to try with imaginative end results. Also included is a limited list of suppliers.

—Barbara Erfani

Getting Started in Candlemaking
Walter E. Schutz
1972; 96pp.
$2.95 postpaid
from:
Macmillan Pub. Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

Internal Fracture Marks

Internal fracture marks result from cooling the candle too rapidly. Control the cooling by leaving the poured candle in its mold and submerging the whole unit in warm water for about a half hour. This not only ensures slower cooling and fewer fracture marks, but it also allows trapped air bubbles to rise and escape.

Mottled Appearance

There may be several reasons for this defect: the candle may have cooled too slowly if it is summertime or if the room is too hot. Or the wax used may have been too old and remelted too many times. In most cases, however, a mottled appearance results from a lack of stearin.

Shiny and Pitted Candles

If candles are shiny and pitted, chances are the wax was too hot when poured. Although wax does not boil, any moisture in it will boil at 212 degrees, forming bubbles of steam that become trapped. Pour the wax at 175 degrees for the best results.

Seams and Blemishes

The joining seam in a metal mold leaves a ridge on the candle which can be removed with a knife or spatula. Hold the knife at right angles to the candle and slide it down the seam. Pull firmly without any vibration which could leave a chatter mark. When the surface is smooth, polish the candle with a nylon stocking.

Caved-in Candles

Sometimes you may find that a candle has caved in at the middle. This is the result of neglecting to poke vent holes in the partially set candle. These vent holes are necessary to relieve the stress of the shrinking wax and to eliminate the vacuum which causes cave-ins.

Innunit

Little indeed appears in the creative art of the Eskimo people that does not concern itself with the central problems of life: the hunt, creatures of the hunt and their spirit world, dying, and having children.

So it is that birds, animals, people of their world are the sculpture of the Inuit— the only people. Large black and white photos of these sculptures convey qualities of stolid heaviness and smooth grace. If you are into soapstone carving or thinking about it, here is a rich idea source.

Text is printed in both English and French, is sparing with words, generous with over 75 pages of illustrations. There is an opening section on Eskimo life, character, and art. Also included are many Eskimo prints which are particularly appealing for their abstract design qualities. All art shown is post 1960.

—Elizabeth Moss

Innunit
(The Art of the Canadian Eskimo)
W.T. Larmour
Issued under the authority of the Minister of Indian Affairs and Northern Development, Canada
1967; 103pp.
$3.00 postpaid from USA
(includes 20% surcharge outside of Canada)
from:
Information Canada Bookstore
800 Granville St.
Vancouver, B.C. Canada

SOAPSTONE CARVING

by Elizabeth Moss

THE STONE . . Soapstone carving, originally an Eskimo art medium, may be for you if you want a hands on, sensory thing. Carving soapstone is high satisfaction yield, minimum time and expense outlay. Two or three evenings, some minimal tools, and a highly handleable carving can be born.

The soft stone takes well to abstract, pure, rounding shapes that beginners (children included— it is right for the classroom) can carve with near professional results. More complex figures and carvings are possible as skill grows.

PURCHASE . . Purchase your stone with concern for the shape that can be brought out of a block. Stone is sold by the pound ($.25-$.50 per— small chips often free). A block about 6" x 5" weighs about five pounds, yields a wide variety of shapes to the carver. Smaller pieces, chips, and scraps are suitable to start a beginner. The stone is chalky, easily marked by a fingernail, and will vary in color. Wet the stone in a small area to know what color it will be after it is oiled. Color will range in the warm browns, cool greens, greys.

TOOLS . . Only a few simple tools are needed to begin— a four-way rasp file from the hardware store, a sandpaper in four grits (No. 80, 220, 320, 400), a pen knife, perhaps a hacksaw if you are going to cut your own blocks from a larger block.

PROCESS . . Consider what your stone needs to be, rough out the large forms with the hacksaw (an effort of only several minutes as the stone is very soft), then go ahead with the file and knife to bring the object out. When the basic form is there, smooth with sandpaper (first coarse, then finer grains), wet sanding with the finest paper. For soapstone carvers, this is probably the finest moment— feeling the soft smoothness of the powder talc, the shape of the stone, the roundedness of it in your hands.

Usually soapstone is oiled when smooth. Watco furniture oil works well, is available at unfinished furniture stores, hardware stores. Oil the stone a number of times— until no more soaks in and no dry spots show. When the last oiling is dry, rub with the palms of your hands to bring the shine up. Feel often.

A rich experience for the person who likes to get hands on things to hold, shape, smooth. If soapstone gets to be your thing, some simple stone carving tools or a disc sander are useful for larger, more complex objects. People working in the medium carve pieces varying from fragments to over 100 pounds.

FINDING YOUR OWN . . Some people really into soapstone go finding their own— only they usually don't tell anyone else where they are finding it. Study up on the geology around you and go looking. Soapstone is a talc with other elements mixed in that add to the coloration (iron flecks go rusty brown with oiling.)

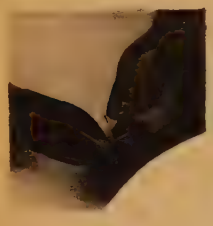
. . . SOAPSTONE carvings are heavy, rounded, smooth, a real tactile experience. But regardless of weight, the finished stone is still soft as when carved. Handle with love.

Contemporary Costume Jewelry

I selected this book for the course I teach in body adornment because its approach is imaginative, pretty comprehensive, easy to follow and well-illustrated—— essential for a "how-to" book. It encourages people to use their own ingenuity in recycling materials and found objects, and is full of information on a wide variety of simple techniques for combining these serendipitous elements. Chapters on: TOOLS (e.g., power tools, findings, and a terrific what-glue-to-use-with-what material chart); WIRE (basic techniques including soldering); METAL: here, the simplest techniques are discussed, (such as cutting, piercing, tooling, enameling) since the idea is to combine media and avoid the exhaustive techniques like lost wax casting associated with traditional methods, thus encouraging spontaneity and free-flowing imagination; WOOD (e.g., making beads, carving, inlay, woodburning); GLASS (e.g., history, stained glass, molded glass); PLASTICS (e.g., sawing and bending plexiglass, cast plastics); CLAY (e.g., making beads, bread doughs); FABRICS, FIBER, and LEATHER (e.g., stitchery, embroidery, stuffing); PAPER (e.g., quilling techniques, papier maché); SHELLS, STONES, FEATHERS and BONES (e.g., scrimshaw). The book contains a good bibliography, list of sources of supply. Photos of finished pieces, range from simple "craftsy" stuff to really good jewelry in the "art" category.

—Leslie Correll

Contemporary Costume Jewelry
(A Multimedia Approach)
Elyse Sommer
1974; 212pp.
$3.95 postpaid
from:
Crown Publishers
419 Park Ave South
New York, NY 10016
or Whole Earth



Ivory and silver with scrimshaw simulated with decoupage by the author.

Pants clip of five rows of wrapped welting. Beads are sewn in between top and bottom two rows for a decorative effect and to provide a button-loop closing. Maire Feinberg. Photo, Ron Morecraft.

Cream Rises
JEWELRY

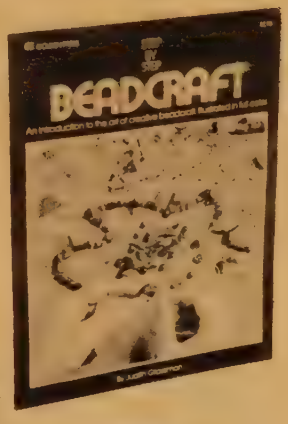
Jewelry Making & Design *Old fashioned & Good* 156
Metal Techniques for Craftsmen *Definitive text* 156
Contemporary Costume Jewelry *Comprehensive & innovative* 556
Handbook on Beads *History & classification* 556
Universal Bead *Romance of beads* 556
Craft of the North American Indians *Indian beadwork* 547

Step-by-Step Beadcraft

Your most basic bead, from stringing to weaving; projects are less than appealing but techniques are there, clearly diagrammed.

—DS

Step-by-Step Beadcraft
(An introduction to the art of creative beadcraft)
Judith Glassman
1974; 64 pp.
$2.95 postpaid
from:
Golden Press
P.O. Box 700
Racine, WI 53404
or Whole Earth



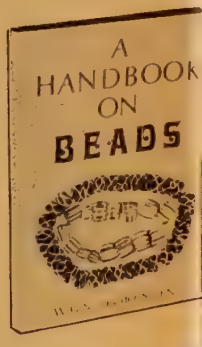
This beaded vest, done by Crow Indians, shows how the lazy stitch can be used to create pictures. Courtesy of the American Museum of Natural History.

A Handbook on Beads

This is probably the best available book for the identification of old glass trade beads. It attempts to establish typology and terminology for practically all glass beads emerging from Europe (Venice, Amsterdam, Czechoslovakia, etc.) as well as many types from India, Persia and the Middle East, and Africa. Beads of shell, agate, carnelian, and Egyptian paste are discussed, though with less emphasis. There are good technical description of the manufacture of glass and other beads, and good charts on the chemical analysis of glass beads of differing origins. The charts for identifying beads by shape, size and embellishment (in six languages) are excellent.

—Leslie Correll

A Handbook on Beads
W.G.N. van der Sleen
No date given; 128 pp.
$5.20 postpaid
from:
Liberty Cap Books
R.D. 7
York, PA 17402
or Whole Earth

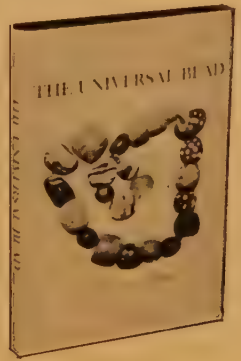


9 bead with dot in circle
10 scrabble bead
11 ogee bead
12 ogee bead
13 scallop bead
14 palm-leaf, fern or feather bead
15 zigzag bead
16 combed bead
17 chequer bead

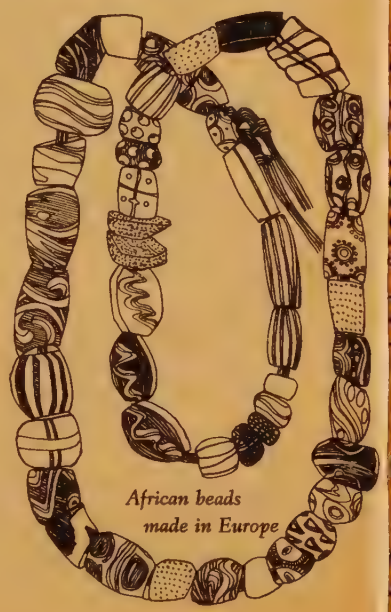
The Universal Bead

This is a warm and personal book, an account of the part that beads have played in human history told by someone excited by her subject. All types of beads are examined—— amber, glass, stone, shell, etc.—— their history, their use as talismans & amulets, as well as their function as objects of trade, rank, decoration, and wealth for peoples all over the world during many centuries. Included are many well-done line drawings, photographs and color plates of a superlative array of gorgeous beadwork and beads. A lovely book.

—Leslie Correll



The Universal Bead
Joan Mowat Erikson
1969; 191pp.
$10.00 postpaid
from:
W.W. Norton
and Company, Inc.
500 Fifth Ave.
New York, NY 10036
or Whole Earth



African beads made in Europe

Stained Glass Primer

Just as the title suggests, Mollica presents the basic principles of working with stained glass. The steps are clearly described, and the tools and materials are introduced with the beginner in mind. There's a good glossary, a sample cartoon for a first project, and a bibliography for digging deeper.

—Scott Beach

Stained Glass Primer
Peter Mollica
1971; 1972; 1973; 87pp.
$3.25 postpaid
from:
Mollica Stained Glass Press
1940A Bonita
Berkeley, CA 94704
or Whole Earth

Cream Rises
GLASS

Creative Glass Blowing *Still good* 159
Stained Glass Primer *Basic craftsmanship* 557
Stained Glass Lamps
Elementary thru "Tiffany" 557
Glass Blowing: A Search for Form
For the artist in glass 568

Cutting difficult edge first.

Your first leaded glass panel should be designed to develop glass cutting, leading, and soldering skills rather than to produce a work of art.

An initial panel size of about 10" x 12" is suggested. This allows you to work with ten or twenty reasonable size pieces of glass. Very small and oddly shaped pieces of glass are difficult both to cut and lead. They should be avoided.

The remainder of this chapter and the next chapter are keyed to cutting and leading this panel (Fig. 1).

•

Before this you may want to practice cutting lead. Don't forget to stretch it first. To cut the lead hold it firmly on the work bench with the fingers of the left hand, place the glazing knife close to the fingers, and cut through the lead slowly. Rock the knife slightly from left to right as you cut unless the knife has a curved blade, in which case rock the blade back and forth. The rocking motion should be VERY SLIGHT, as should be your pressing on the lead. Light pressure with the slight rocking motion will allow the blade to slowly work its way through without crushing the heart of the lead.

•

Stained Glass Lamps

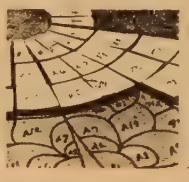
Very clear and thorough step-by-step instruction in the fabrication of stained glass lamps. Numerous and well-chosen illustrations and photographs of techniques and of finished work.

The authors seem to have a great deal of experience in working with beginners and are aware of the common problems and mistakes involved in learning various processes. With a good deal of practice and hard work a serious person should be able to get enough information from this book alone to construct well-built, esthetically pleasing lamps. Additional plusses:

1) *Good range of examples and patterns to work from and expand upon.*
2) *Extremely good section on lamp mathematics and calculation.*
3) *A section on slumping glass in kilns and fabricating bent panel lamps.*

—Bob Drago

Stained Glass Lamps
(Construction and Design)
Anita and Seymour Isenberg
1974; 222pp.
$5.95 postpaid
from:
Chilton Book Company
Attn: Customer Service Dept.
Chilton Way
Radnor, PA 19089
or Whole Earth



To avoid confusion as each piece of glass is cut to pattern, its pattern is fixed to it with tape and the glass and pattern are placed back on the work drawing. Each piece of pattern is used for only one piece of glass.

CRAFT

PART TWO

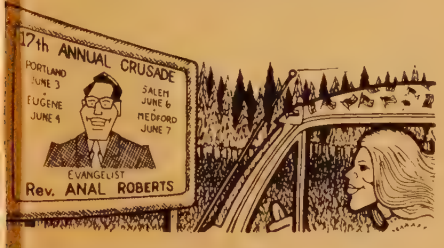
7. . .

INTRODUCING ROSEBUD ZWALYIMEH

A Volkswagen gathering reduced speed on an Oregon country highway is entirely pasted over with little American flag decals. Only the windows, headlights, brake signals, license plates and door handles have been left uncovered. Also, the radio antenna is still bare, the better to pull in the sound waves of Van Morrison singing *Into the Mystic*.

The driver of this starred-and-striped vehicle is Rosebud Zwalyimeh. Long auburn hair parted in the middle shelters a face enhanced by an expression of raised awareness that its beauty is deemed so by Caucasian counter-cultural conditioning. She is wearing a see-through Mexican blouse and jeans embroidered with imaginary tropical fish.

Occasionally she passes a roadside billboard. One announces a series of evangelical revival meetings in the area to be conducted by faith-healer Anal Roberts.



Another features Smokey the Bear endorsing the Air Force Reserves. Another simply says, *Compliments of a Friend*.

Eventually, Rosebud picks up a hitchhiker— a uniformed highway patrol person.

"Don't you know it's against the law," he asks, "to stop on a public freeway like that?"

"But, officer— you were thumbing a ride."

"Well, I had to. Somebody stole my motorcycle."

"Are you gonna give me a ticket?"

"Depends." He removes his helmet. "What is it with all those decals? You making fun of the American flag?"

"I thought that's supposed to be patriotic— to display— "

"One decal, sure. Two, maybe three. Five, even ten is still patriotic. But not the whole goddam car. That's ridiculous."

"At what point does it become unpatriotic, though?"

"I would say a dozen decals begin to border on sarcasm."

"Suppose I were a sweet little old lady; wouldn't you just consider it eccentric behavior?"

"Yeah, probably."

"Then tell me, at what age does sarcasm turn into eccentricity?"

"I give up," he says, pretending not to look at the outline of her bosom. "But the last time I tried to have a discussion with somebody dressed like you, she called me a pig."

"Because of something you did?"

"No, because of this uniform. I was actually a pig before I became a cop, but they cheered me for that...."

Flashiebackie:

A large crowd at a peace rally is cheering the highway patrol person, a few years younger, as he stands on a flatbed truck being used for a stage. He is wearing a uniform of the Green Berets, and holds up between his thumb and first two fingers a detached human ear on the other side of the microphone into which he speaks.

"I appreciate your applause," he says to the audience, "but please remember that I'm really talking to this ear. Forgive me, ear, for cutting you off as a souvenir from one of my many victims."

Someone in the crowd calls out: "You're the victim! You're the victim!"

"Forgive me, ear, for having tortured your former owner and forcing you to listen to his screams of pain."

"It wasn't your fault," someone else shouts. "You were just a lackey for the ruling class!"

"Forgive me, ear, for shooting heroin so that I could drive shooting bullets out of my mind."

"It's all right," the ear responds. "You were already addicted to the system...."

Two shadowy figures are pouring gasoline over a third one who sits on a stolen highway patrol motorcycle. At dusk he rides it down a city street, turns onto the sidewalk, crashes straight through the plate glass window of the Chase-Folly Bank and proceeds to explode into fire.

The local newspaper receives this handwritten message:

Materialism has become obsolete.

Spirituality continues to fill the void.

Any inconvenience to citizens is a necessary byproduct of abstract complicity.

We are all responsible for whatever the banks do with our money.

What happened at Chase-Folly must be considered as the first American Kamikaze action.

Heretofore, individuals have destroyed only themselves because they were too sensitive to bear inhumanity any longer.

However, there has now come into being a new organization for those of us who wish to transform our acts of self-destruction into socially useful deeds.

If you decide to take your own life, why not remove an evil institution in the process?

That is the only requirement to join Better Your Exit.

—BYE Communication #1

Not too long after Rosebud Zwalyimeh drops off the highway patrol person at his attorney's office downtown, she picks up another hitchhiker. But this one isn't thumbing a ride, he's tongueing a ride.

"Where are you going?" Rosebud asks.

"I am working at Camp Crap," Tongue Fu answers.

"That's where I'm headed for. Isn't that an amazing coincidence?"

"Perhaps not. Must we not also contemplate all those coincidences which do not happen to us?"

[Continued, page 575]

Macramé - Advanced Technique and Design

A large section on fancy nautical ropework with carefully illustrated instructions makes this book unique from other macramé books we reviewed. Traditional areas of fancywork that may not be known to you if you have only recently discovered macramé are discussed. For the macramé-er interested in creative design, this book offers examples of how to apply nautical ropework to wall hangings, three-dimensional sculpture, and clothing. Also included are instructions for projects, a glossary, illustrations of ornamental knots, and such techniques as braiding, hitching, and how to make woven and tied mats. The great thing about macramé is that you can do so much with it, and this book will help you be both artful and practical. Color illustrations.

—Pat Doumani
[Suggested by Susan Bryon]

Macramé - Advanced Technique and Design
Norman and Lilian Rick
1972; 143pp.
$3.95 postpaid
from:
Doubleday and Company, Inc.
501 Franklin Ave.
Garden City, L.I., NY 11530
or Whole Earth

Encyclopedia of Knots and Fancy Rope Work

Enough knots for a lifetime! They're all there, done by men who've made them their lifetimes. Begin at the beginning, because rapidly the instructions are reduced to a photo, the knot name and a brief description— all that's necessary if you have the experience and the eye for nautical work. You'll also find hammocks, netting, macramé, sailcloth duffle bags and rope ladders in case you tire of the 415 kinds of sennit braids. For those ready to brave it and for salt-sprayed and tarred book nuts like me who coveted it for years before buying it.

—DS

Encyclopedia of Knots and Fancy Rope Work
Raoul M. Graumont
& John J. Hensel
1939; 690pp.
$15.00 postpaid
from:
Cornell Maritime Press, Inc.
Box 109
Cambridge, MD 21613
or Whole Earth

Fig. 3

Fig. 3: The *Five-Strand Crabber's Eye Sennit* has its strands separated 3-2. Start with strand *e*; bring it down under from right to left; then pass it between *b* and *c* and over *c* toward the right, or its own side. Next, bring *a* down under from left to right and between *d* and *e* and over *e* toward the left, or its own side. Bring *d* down under from right to left, then under two and over one toward the right side, or in other words, between *c* and *a* and over *a*. Proceed by bringing *b* down from left to right and between *e* and *d* and over *d*. Continue by bringing *e* down under from right to left and between *a* and *b* and over *b* toward the right. The key to this braid is down under from left to right, then right to left, going under one and over one from one side, then under two and over one from the other side.

Cream Rises
MACRAME'

Step-by-Step Macramé *Basic beginners* 155
Macramé, Creative Design in Knotting *Intermediate-advanced* 174
Macramé *Best beginning thru intermediate* 174
Far Beyond the Fringe *Advanced innovative* 558
Encyclopedia of Knots *Technical, no pampering* 558
Encyclopedia of Needlework *The friendly giant* 571

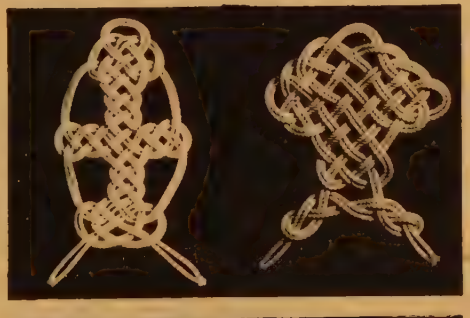
Far Beyond the Fringe

Want an exciting new approach to macramé? Try Eugene Andes' Far Beyond the Fringe. Lamps, chairs, swings, hangings, cradles, free standing forms, including a child's castle are among the projects you may not have tried before. Although there are step-by-step instructions for a few projects, the main emphasis is on techniques that allow you to abandon detailed instructions and create your own designs. Eugene Andes covers important technical problems that he came across in his own work, involving deleting and replacing cord, iron or wooden frames for three dimensional designs, and dyeing of cord. An excellent book for anyone who wishes to get away from belts, necklaces, and purses; encourages you to macramé in unconventional but useful ways.

—Pat Doumani
[Suggested by Susan Bryon]

Far Beyond the Fringe
Eugene Andes
1973; 160pp.
$4.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

The basket weave pattern was first used in clothing. It is based on the alternating square knot pattern, but ties faster, uses less cord, and has more give and stretch than its parent. In the basket weave pattern, every other row of square knots is replaced by simple over and under weaving of the cords. This pattern may be varied almost indefinitely, and may be used to tie small areas within a field of alternating square knots.



Contemporary Batik and Tie-Dye

If you like a book that can give you a feel for a whole range of ways to work with dyes on cloth, this is the one you should pick up. The pictures (alas that there aren't more in color) give you dive and exciting examples of what you can make. Th step-by-step illustrations throughout help to clari procedures that words can't convey. For a newc to the art the major problem will be trying to pic out which techniques to try first. Along with an extensive glossary, bibliography, supply source lis and index, this book becomes a real tool for the craftsman.

—Susan Mehr

Contemporary Batik and Tie-Dye
(Methods, Inspiration, Dyes)
Dona Z. Meilach
1973; 280pp.
$4.95 postpaid
from:
Crown Publishers
419 Park Avenue South
New York, NY 10016
or Whole Earth

Dyes may be applied directly with or without resist materials. Waxes may be used and sometimes the resist can be a piece of paper placed on the fabric to leave a white space when dye is sprayed on with a spray nozzle.

•

Spoon shapes, sticks, plastic shapes, anything can be use as a 'resist' much as a stencil is used to achieve design.

•

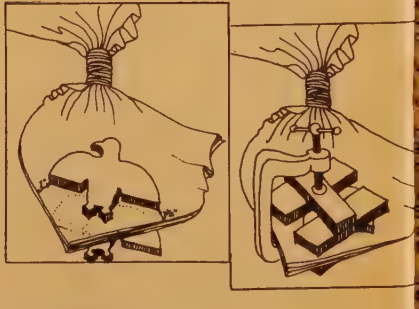
Thicken the dye slightly and use it with a squeeze bottle from catsup or hair tint.

Dye-Craft

RIT Dye Consumer Service Department puts out a wonderful 25¢ pamphlet on ways to use its dyes, a good buy for anyone who wants to check out what working with dyes is like before making a larger investment in time and money. The all-color photographs alone are worth it. What it tells you how to do with superb flair is tie-dye. You know how tie-dye so often means that monotonous bulls eye on the front of a T-shirt? Not he There are pictures of all sorts of clothes you can make with detailed illustrations on how to knot and dye fabr for similar results. But I have two words of caution. Although it claims to include batik in the dye methods described, I wouldn't rely on it if you are new to the a Also, RIT dyes are not as colorfast as some other dyes that are available. If you want your spectacular new shirt to remain spectacular after the second wash, you should hunt up other dyes. (On the next page are a co of good supply sources on the West coast.)

—Susan Mehra

Dye-Craft
Jo Ahern Segal
$ .25 postpaid
from:
RIT Consumer Service Department
Best Foods Division CPC International Inc.
1437 West Morris St.
Indianapolis, IN 46206



The Eagle Block

(Advanced, time-consuming, block-dyeing project)

BATIK SUPPLIES

by Robin Grey
The Batik Art Place
Mill Valley, California

ar Whole Earth People,

e compiled some up-to-date information on Procion es, batikable fabrics, waxing techniques and tjanting ols that might be of interest to your readers.

YES

ne of the best dyes available is called Procion dye. It is the "fiber reactive" type, which simply means that the lecule in the fabric and the molecule in the dye make a manent bond. It can be used in cold water, is light and sh fast, is easily adaptable for use with children, but at same time produces professional results. It doesn't uire the caustic fixers like lye that some dyes do. Also, u can see the color as soon as the fabric enters the dye-h. The colors can be painted on the cloth or made o a solution for dipping or can be mixed together to ate a tremendous range of color possibilities. If a or seems too "brassy," counter it with a small amount its complement. Color intensity can be controlled by ng more or less dye; vary the recipe depending on the ength of the individual color.

re are a few companies that package and distribute cion dye and the fixer under their own name. These duce poor results and are not economical. I suggest chasing dyes from one of the companies listed below. ch color is sold by the pound, economical for schools d heavy dye users. Occasional batikers may want to ide pounds with others. For the widest range of lors with the least amount of expense, I recommend ginning with lemon, fuschia, navy, orange, and scarlet, n the others. Buy turquoise or black for paint-on tie-dye only.

ystone-Ingham Co. - largest range of colors
3844 Struikman Rd.
rritos, Calif. 90701

asonic Art & Frame - sells small test samples
157 Masonic Ave. sells thickener for paint-on
n Francisco, CA 94117

harma Trading Co. - sells 2-oz. packages as well
952 University Ave as pounds; sells thickener
O. Box 1288 for paint-on
erkeley, CA 94701

FABRIC

he fabric and its preparation is very important for good atik results. No synthetic fabrics or fabrics with perma-ent finishes should be used. There will be some riation depending on the individual fabric, but generally is the rule: heaviest shades will be produced on ose fabrics with lighter shades following.

Viscose rayons, cupramonium rayons
100% raw silk, silk & cupramonium blends
100% cotton terrycloth, 100% cotton velveteen
mercerized 100% cottons
other 100% silks
100% combed cottons (such as sateen & lawn)
non-mercerized fabrics (such as muslin, flannel, corduroy)

ensely woven fabrics dye better than loosely woven brics. Lightweight fabrics like organdy and batiste e excellent for wall hangings, but may need to be backed ecause of their thinness. Silk and medium weight ottons work well for hangings where the light will ter through. Heavy canvas, poplin and linen make od upholstery fabrics.

vest in good fabric from reliable sources— it's worth . Unfortunately, sales people and bolt information are ten incorrect about the fabric content. Some advice to not buy remnants and to buy off a bolt that has the ber content listed whenever possible. Preferably, test e fabric before buying. Cut a small test sample, dye with a piece of fabric that is known to work. Compare e results. The problem of finding the bolt again when turning to the store can be solved by using an indelible n to mark the price and type of material on the test mple. If the bolt isn't marked, put a small letter or mber on both the bolt and the test sample, so that the olt can be later marked "Batikable" for others to know.

achine wash all durable fabric with detergent 2-3 times a hot cycle. Delicate fabrics should be hand washed. ere is a list of good fabric sources that stay well stocked.

hai Silks - large variety of lightweight
33 Main silks $ .80 per sample set
e Altos, CA 94022 (test before buying)

ew York Fabrics - cupramonium rayon, also
519 San Pablo cuprasohn - $2.99 per
akland, CA yard, 10% discount to WE
612 readers

ullivan Awning Co. - mail orders of $20 or more,
45 South Van Ness various weight ducks, heavy
n Francisco, CA sateen, muslins, burlap— will
103 send samples on request
(test before buying)

Britex - 4 or 5 silks, silk chiffon,
146 Geary handkerchief linen, batiste
San Francisco, CA will send samples on request
94108 (test before buying)

Handicraft House - variety of fabrics,
110 West Esplanade samples $ .25
North Vancouver, B.C.
Canada

Dharma Trading Co. - large variety, viscose rayons,
1952 University Ave. mercerized & combed cotton,
P.O. Box 1288 all unsized
Berkeley, CA 94701

Screen Process Suppliers - carries Indian Head
1199 East 12th St. @ $1.55 per yard
Oakland, CA 94606

Test Fabrics, Inc. - good natural fiber section
P.O. Box 118 mail orders of $25.00
200 Blackford Ave. send for pamphlet
Middlesex, NJ 08846

WAX

The wax used for batik is a mixture of a sticky type wax that is flexible and will adhere to the cloth, and a less pliable wax that will crackle. The ideal combination is beeswax and paraffin. Microcrystalline and a wax called "sticky wax" are often used as substitutes for beeswax. Microcrystalline is superior to "sticky wax," but both of these waxes produce fuzzier, less defined crackle than beeswax. One method for getting good sharp crackle is to crunch the batik up while it's still warm and put in the freezer for a few minutes. Batikers using Procion dye should use a heavier ratio of beeswax than normal and may need to rewax areas between dyes due to the slightly erosive nature of the fiber.

Some people reclaim their wax and use it to get special effects that couldn't be obtained by using fresh wax. Wax can be reclaimed by scraping or boiling it off without soap. Allow it to cool and settle, then it can be remelted.

Paraffin can be purchased in one-pound boxes from the grocery store or from candle suppliers and hobby stores. Beeswax is harder to find and is generally over $2.50 per pound. Some art stores and candle suppliers have it. Some churches discard their old beeswax candles. An inexpensive source are local beekeepers. If the wax is dirty it may have to be heated and strained. Look for beeswax that smells like honey and has a golden or slightly darker color. If it doesn't have these qualities it may have been over-refined.

TJANTINGS

The best tjanting tools are made from copper, after that heavy brass. All others are usually of poor quality. Before purchasing a tjanting, ask if it can be returned if it is faulty. Sometimes handles leak or the tools develop other problems. If a tool's spout is too large, putting a piece of cotton inside will help slow down the flow of wax. It's better to buy a small size to begin with, though very fine spouts may need to be cleaned occasionally.

Indonesian tjantings are difficult to use and the wax doesn't penetrate the fabric well. They are made to be used on fabric that is hanging rather than laying flat in a table or stretcher. The brass tjantings with bowls from West Germany are some of the best made. You can expect to pay over $4.00 for a good tjanting.

Screen Process Supplies @ $3.80, small, med, & large
1199 East 12th St. they will replace faulty tools
Oakland, CA 94606

There are several good books on batik that will explain techniques and processes. An experienced teacher is always helpful for learning batik. . . Happy batiking.

•

Robin Grey does an interesting pamphlet on batiking, called **The Batiker's Guide.** *It gives step-by-step instructions for using Procion dyes and seems pretty well-organized. $2.75 postpaid. Write to:*

The Batik Art Place
530a Miller Ave.
Mill Valley, CA 94941

Cream Rises
BATIK

Contemporary Batik & Tie-Dye
Thorough and exciting 558

Tie & Dye as a Present-Day Craft
All the "How-to" 175

Dyecraft *Tie-dye with flair* 559

Batik: The Art & Craft
History, traditional designs 175

Batik: Art and Craft
Basics and paper batik 175

Batik: New Look At An Ancient Art

The purpose of this book is to introduce the artist to the possibilities of batik as a medium for fine art.

And it does that, and only that, very well. A book for the artist rather than the craftsman, it covers the techniques of batik in simple, clear language. It is well illustrated with photographs of the process at all stages of a wide variety of finished batiks. Emphasis in the book is on developing the skills of using the brush and the traditional tjanting tool for applying wax. I found the section on the ancient tool especially informative, since most books pass it over with only a brief explanation of how it works. There is a section on different things you can make: lampshades, room dividers and dolls, and a good supply list at the end.

—Susan Mehra

Batik: New Look at an Ancient Art
Robin & Jennifer Shaw
1974; 96pp.
$3.95 postpaid
from:
Doubleday & Co. Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Batik Suppliers

Dharma Trading Co.
1952 University Ave.
P.O. Box 1288
Berkeley, Calif. 94701

Catalogue 25¢

One of the hardest things to come by these days is cloth which will take a dye well. Untreated cotton cloth is almost impossible to find. If you are having trouble try sending for the supply list put out by Dharma Trading Co. They have nearly a dozen grades of cloth for dyeing purposes and can also supply you with a good procion type dye, a dye thickener, and other paraphanalia used in dyeing cloth.

Inkodye: Screen Process Supplies Manu. Co.
1199 E. 12th St.
Oakland, Calif. 94606

Catalogue 25¢

Inkodye is tricky to use, but produces extremely bright colors that hold up well in the wash. The tricky part is that the dyes are dull greyish in color when you apply them. The color comes out when the dyed cloth is exposed to sunlight or heat. So when you want to know the intensity of a color you are working with, or you want to mix colors, you need to keep a sample strip of cloth and a hot iron handy to test out just what you're doing. The color emerges as if by magic within a few seconds under the hot iron. The dye comes in a thick liquid form which I have found to be very convenient for painting directly onto cloth with a brush. It can be thinned with water to make a vat dye, or used as is on a silk screen. One other warning: the dyes begin to deteriorate after six months, so only order enough for your present needs.

—Susan Mehra

Tjantings

Available from Stephen Blumrich: excellent tjanting and tjanting brush, made of heavy copper, gasketed, won't leak. He also sells calcomine dyes (not light fast) and a batik instruction booklet ($1.50). His tools are best.

—DS

Tjanting, 1/16" diameter spout - $4.50 postpaid
Tjanting brush, 1/2" flat - $3.75 postpaid
from:
Stephen Blumrich
Rt. 1, Box 25a
Halsey, OR 97348

Tjanting

CRAFT

CRAFT

The Joy of Spinning

The folksy and informative narrative of how Ms. Kluger learned spinning and natural dyeing. She presents good factual information on all important aspects of preparing fibers for spinning, the spinning process, and natural dyeing, and includes some of the folklore in the U.S. as well. Recommended for people interested in learning and who have time to enjoy a bit of story telling on the side.

—Carol Mortensen

The Joy of Spinning
Marilyn Kluger
1971; 187pp.
$6.95 postpaid
from:
Simon & Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

Wool Away; The Art and Technique of Shearing

The book for the inexperienced (not the unexperienced) as well as the accomplished sheep shearer. Godfrey Bowen, a world renowned shearer, goes into depth in his coverage of the shearing of sheep. He has a "blow-by-blow" account of shearing a sheep complete with photographs of each step, discusses shearing gear in terms of the proper use and care of the equipment, gives a good discussion on the breeds of sheep, and he even talks of the correct diet and dress of the sheep shearer. He then takes the reader into a totally new world of sheep shearing competitions. There is a bit of a problem with many colloquial terms, but Bowen realizes this and has provided the reader with a glossary. All in all, truly the book for those really into sheep.

—Carol Mortensen

Wool Away
(The Art and Technique of Shearing)
Godfrey Bowen
1974; 192pp.
$4.50 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

Cream Rises

SPINNING & DYEING FIBERS

Your Handspinning *Still the Bible* **166**
Handspinning *Thorough, expensive reference* **166**
Dye Plants and Dyeing *Best overall natural dyeing* **167**
Natural Plant Dyeing *Companion to* **Dye Plants & Dyeing 560**
Your Yarn Dyeing *Synthetic dyes* **560**
Wool Away; The Art & Technique of Shearing *Complete manual* **560**
Spinning Wheels *Identification* **561**
Mortenson & Nagy Spinning Wheels *Fine wheels* **569**

Natural Dyes and Home Dyeing

Wonderful for its wealth of historical information, more than 150 recipes with special attention given to color-fastness, and an excellent chart for top-dyeing. Includes recipe for iron buff dyeing. In one of the five interesting appendices, the dye materials listed by D'Ambourney read like poetry & send one off into the fields & forests with clippers & basket!

—Sarah Kahn

Natural Dyes & Home Dyeing
(A Practical Guide with over 150 Recipes)
Rita J. Adrosko
1971; 154pp.
$2.00 postpaid
from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014
or Whole Earth

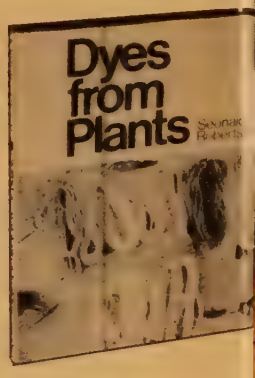
Vigogna, (colour of Vigogna wool.)
From the shoots of the Siberian acacia.
From the dry shoots of the elder.
From the leaves of artichoke.
From rest harrow, Ononis arvensis.
From wild angelica, Angelica sylvestris.
From tuberose crowfoot, Ranunculus bulbosus.
From common bladder sena, Colutea arborescens.
From flowers of balsamine.
From the water parsnip, Sium latifolium.
From Gallium verum, lady's bedstraw.
From the round leaved bell flower, Campanula rotundifolia.
From the pasque flower, Anemone pulsatilla.
From the seven leaved colutea, Coronilla glauca.
From the branches of the fig tree, Ficus carica.
From the rose flowering raspberry, Rubus odoratus.
From the yellow everlasting pea, Lathyrus aphaca.
From the Valantia aparine.
From the thorny hedge gooseberry, Uva crispa.
From the dwarf cistus, Cistus helianthemum.
From the catmint, Nepeta cataria.
From wild lettuce, Lactuca scariola.
From common lettuce, Lactuca sativa, with tin mordant.
From the young branches of the laylock or lilac.

Dyes From Plants

Though books are only second best in learning a traditional craft, this one is particularly satisfying. I feel as though I've taken a long stroll through weedy fields with the author, receiving sound knowledge, encouragement to experiment, and a new relation to things that grow. Intended for beginners and those who wish to experiment rather than dye mountains of one color, the recipes given throughout are for small quantities of yarn (it is easier to multiply for larger amounts than to divide from the pounds-of-yarn recipes most books provide.) The simultaneous method of dyeing is offered— in which plant material & fiber are placed in the cold bath at the same time and brought to a simmer together— a good method for fragile leaves & flowers that cannot stand too much cooking. Gives recipes by season. Well-indexed by color, by plant common name, and again by botanical name. Presentation is clear, thoughtful. Lovely color plates— the one on P. 19 illustrates all that I love about natural dyeing except the wonderful scents and joy of collecting on a dewy morning!

—Sarah Kahn

Dyes From Plants
Seonaid Robertson
1973; 144pp.
$8.95 postpaid
from:
Van Nostrand
Reinhold Co.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth



BLACK CURRANT
Ribes nigrum

The common garden black currant, too well known to merit description, gives a number of pleasant colors. I put an open pan or cooking dish of the freshly gathered currants in a very low oven to draw out the juice, which contains the dye, and strain off the berries, which lose some of their flavor but can still be used combined with other fruit in pies or other dishes. In winter I use the liquid from bottled or canned currants. The colors are beautiful but not very fast.

Mordant: Alum gives deep lilac, tin gives purple.

Method: The simultaneous method of dyeing is preferable here. Put the wool in the bath and slowly bring it to the simmer. Simmer wool and juice for ½ to 1 hour. As the syrupy juice is apt to stick to the pan, be sure to work the wool frequently. Make the bath up to 2/3 gallon (not the usual full gallon) with additional water if it boils away. Leave the wool soaking in the bath for several hours. By then alum-mordanted wool will be a deep heather pink, which rinses out to strong lilac. Tin-mordanted wool will be a deep purple which rinses out (use soapy water) to a soft purple. Dry.

Your Yarn Dyeing

Elsie Davenport has again cornered the market with a book that is very reasonable in price and packed full of good information— this time the book is on the art of dyeing: color theory, equipment and working methods. In particular, Ms. Davenport's coverage of synthetic dyestuffs is of great value to the home dyer (inexperienced and advanced) who is looking for coloring matter which is color fast, has a wide range of hues, and is easily obtained for use on wool, cotton, silk or synthetic fibers and yarns. I recommend this book highly.

—Carol Mortens

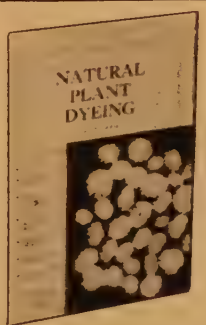
Your Yarn Dyeing
Elsie Davenport
1972; 128pp.
$4.50 postpaid
from:
Select Books
P.O. Box 626
Pacific Grove, CA 9395
or Whole Earth

NAME OF DYESTUFF	FASTNESS: Light	FASTNESS: Alkaline milling	QUANTITIES: Full shade	QUANTITIES: Pale shade	DESC OF C
*Cibalan Yellow GRL	6-7	5	¼ oz. (1·5%)	⅛ (·3%)	Gold yell
*Cibalan Orange RL	6-7	5	¼ oz. (1·5%)	⅛ (·3%)	Ripe
*Cibalan Red 2GL	5-7	5	¼ oz. (3·0%)	⅛ (·5%)	Flam pop
Cibalan Bordeaux 3BL	6-7	5	¼ oz. (3·0%)	1/16 (·3%)	Purp
Cibalan Blue BRL	6-7	5	¼ oz. (3·0%)	⅛ (·5%)	Slig pur
Cibalan Green GL	6-7	5	¼ oz. (3·0%)	⅛ (·5%)	Soft gre
*Cibalan Brown TL	6-7	5	¼ oz. (3·0%)	1/16 (·3%)	War bro
Cibalan Grey 2GL	6-7	5	⅛ oz. (1·0%)	¼ (·3%)	Grey

Natural Plant Dyeing, A Handbook

Companion to Brooklyn Botanic Garden's earlier, indispensable handbook **Dye Plants & Dyeing (167)** *this latest offering augments rather than supplants the first book, but makes one hope they'll continue to publish on this subject. (As I write, carrot tops simmer on the stove— somehow this hadn't occurred to me. . .) Rich in lore, the booklet is an anthology of excellent articles on collecting & storing, classroom dyeing with clear photos of each step (useful to a first-time dyer trying to learn from a book), preparation of fleece, a folk tale on Liberian indigo dyeing, lichens, regional information, the chemistry of dyeing, a list of dye plant suppliers. The recipe for Madder Root unfortunately omits the importance of temperature control for obtaining various reds. The center color-spread shows lovely hues obtained from lichens, how different mordants bring diversity from the same dyebath, and an illustration of color-fastness tests. Indexed by dye sources.*

—Sarah Kahn



Natural Plant Dyeing
A Handbook
Brooklyn Botanic Garden
1973; 64pp.
$1.50 postpaid
from:
Brooklyn Botanic Garden
1000 Washington Avenue
Brooklyn, NY 11225
or Whole Earth

NATURAL DYEING IN THE CLASSROOM Supplies used in classroom dyeing: electric burner, enamel pots, asbestos pad, yarn, scale, sieve, plastic basin, rubber gloves, cotton string, buttons, labels, pencil, measuring cup and spoons, various mordants, wooden spoon, pot holder, thermometer, scissors and dried marigold blossoms.

•

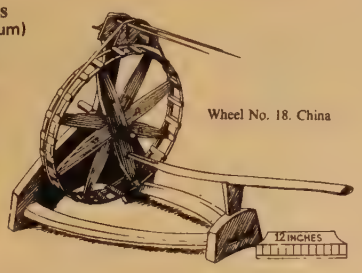
(A) *Chemically Bonded Dyes,* in which a chemical relationship or reaction occurs between the dye and the fiber.
1. *Simple Dyes* (Substantive) which have a direct affinity for the fiber and are usually themselves colored. These are often fugitive but their fastness may be improved by aftertreatment with copper or iron. All natural dyes which chemically bond to wool without a mordant are in this group, but dyes such as the orchil lichens which are not affected by mordants are the best example. They can apparently act as either acid or basic dyes, with the color changing from pink in acid to blue in alkali.
a. *Acid Dyes,* which dye wool and silk directly in an acid or neutral bath. These dyes tend to be very easy to apply, and clear in shade, but have poor fastness to washing and limited fastness to light. The dye fragment in this case is a negatively charged ion. The berry dyes are all in this group, with the natural acids acting to promote the dyeing process. Additional acid, as vinegar, often aids the process, especially in low-acid berries, such as those of pokeberry.

Spinning Wheels

This book documents the John Horner collection (1907) one of the foremost collections of spinning wheels and accessories. With a brief but thorough discussion of the evolution of the various types of spinning implements, the reader is introduced to the types of spinning wheels per se. The book itself contains good line drawings of various types of spindles, distaffs, reeling sticks & wheels from all over the world. A good book, perhaps the only one available, to help people identify antique wheels or spinning implements, as well as informative for those simply interested in the numerous implements which have evolved in spinning.

—Carol Mortensen

Spinning Wheels
(The Ulster Museum)
G. B. Thompson
1964; 52pp.
$1.80 postpaid
from:
Straw Into Gold
The Unicorn
Drummond
(see page 546)



Wheel No. 18. China

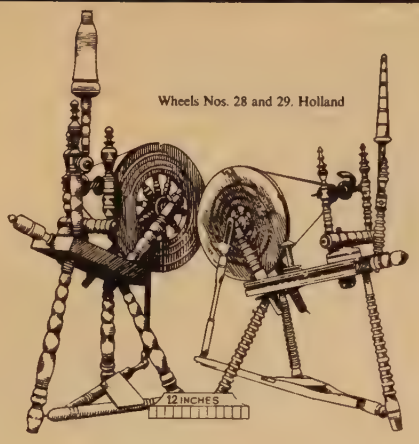
More Spinning Wheels

Also of interest: The Unicorn (see page 546) sells spinning wheel and loom plans ($2.75 postpaid). For the experienced woodworker, fully detailed, with lists of materials, but include no instructions. The loom plans are for 4-harness, 8 treadle hardwood frame jack loom that weaves 45". "Looks alright from a quick scan," says Norm.

—DS

Cream Rises
LOOMS

Macomber *The professional's choice* **169**
Gilmore *Homey and excellent* **169**
Gunnar Andersons
Quiet beauty and efficiency **169**



Wheels Nos. 28 and 29. Holland

Spindle & Wheel Makers

Turning Point
1806 Bancroft Way
Berkeley, CA 94703
Wood collective with good spindles. Now carry Japan woodworker tools. (see Pg. 143) Write for prices.

Clemes & Clemes
Spinning Wheel
665 San Pablo Ave.
Pinole, CA 94564
Good line of walnut & maple spindles, 5 types, stained & varnished. Catalog free.

Gallagher
318 Pacheco
Santa Cruz, CA 95060
Spindles, nice shapes.

C & G. Rognvaldson
RR No. 4
Acton, Ontario, Canada
Nice looking castle wheel, choice of woods. Write for price list.

And don't overlook the fibre & dye materials suppliers (on pg. 562); they often have good equipment also.

—DS

Miller Loom Plans

Plans & Blue Line Prints for Building a 48", Eight-Harness, Jack-type Floor Loom with an Overhead Beater, Built-in Spreader.

It helps to know who the reviewer is. This one's a woodworker interested in loom design; he hasn't seen the finished product of either set of loom plans reviewed below and doesn't know anyone who has woven with one. Both sets of plans, however, are conscientiously detailed. On paper both look solid and well designed.

Phil Miller's plans are for a handsome, eight harness, jack loom made from Douglas fir with—— nice feature—— an overhead beater; the loom can be made 48-60" wide. But it's not for everyone: plans require access to power tools (table saw, radial arm saw, drill press, jointer.) Time—— "80 to 120 hours for me—— double or triple that according to your woodworking experience or lack of it." Cost about $225 (minus reed) plus $20.00 for the plans (9 pp. of blueprints and 144 pp. of illustrated instructions).

But if time, cost, and shop requirements don't scare you, Miller is a good wood shop companion. He takes you step by step through the process, offers lots of tips, diagrams of jigs, notes on how best to place glueing clamps, etc. These are the plans for the heavy-duty, craftsman's quality loom which he makes commercially; he hasn't simplified his design for the novice.

—Norman Potter

Miller Loom Plans
(Includes looseleaf binder)
$20.00 postpaid
from:
Phil Miller Looms
6221 Hollis St.
Emeryville, CA 94608

American weavers seem to prefer the jack type since it has fewer cords to adjust, has metal heddles rather than string, and is often compact and folds up. European weavers seem to prefer the counterbalance and contramarche looms which have large sturdy frames, overhead beaters, fewer metal parts, and so are quieter and less expensive. I have tried to combine the better parts of all these types to fill in the gap and offer the prospective loom builder/buyer a wider choice.

•

Carpentry, loom building, and weaving are exacting and precise crafts, but also romantic and mystical affairs. You work alone with natural materials to form them into a finished piece that has purpose and beauty. The outer compensations are usually minimal, as craftsmen seem to work long hours and stay poor, but the inner rewards can bring you more in touch with yourself and your place in the universe than money or prestige. You develop your skills day by day, learning through your experience with different materials and methods, developing confidence in your abilities.

Building the Oregon Loom

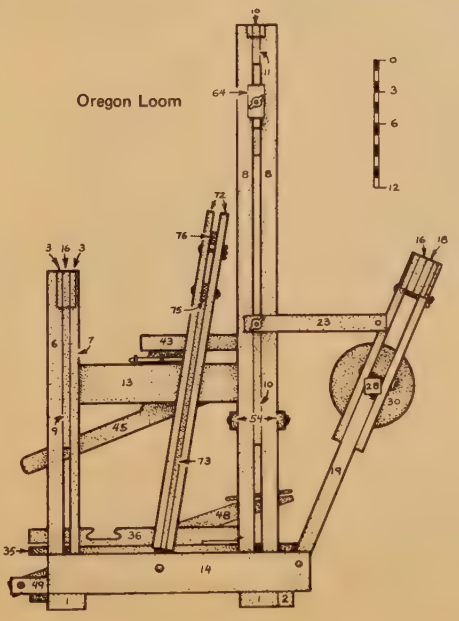
David Mathieson, on the other hand, has designed his loom and written for the builder with little or no wood working experience, few tools, and no access to power tools. His loom, also of Doug. fir, is a four harness counterbalance that weaves up to 45" of material. It's good looking and ought to be sturdy. Cost—— $100 (minus reed) is a rough guess; less expensive than Miller's because it's smaller and uses string heddles and wooden ratchets.

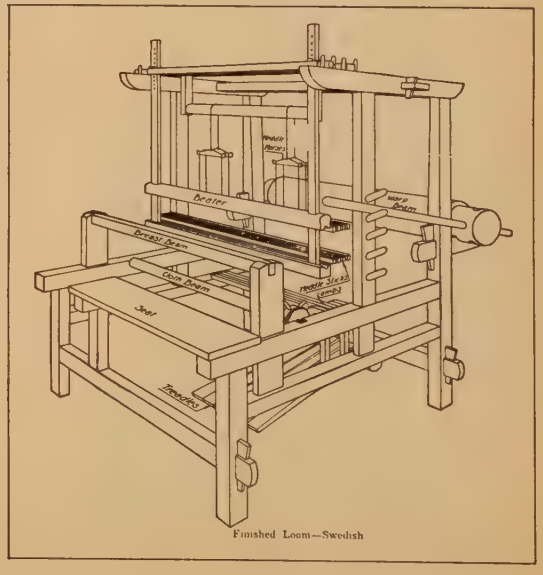
Both M's include lists of materials, plans for the weaver's bench and Miller includes blueprints for a warping board and spool rack.

If you must have a Swedish or a Danish loom, How to Build a Loom *($3.25 postpaid, from Select Books, pg 546) has the absolute minimum info. for the project. No instructions, no material lists, just dimensioned drawings. The looms are beautiful, but some details, like how the cloth beam on the Swedish loom is held in place, are simply not there. Also includes drawings for a warping reel, shuttle, spool rack, and floor swift.*

—Norman Potter

Building the Oregon Loom
David Mathieson
1973; 158pp.
$4.95 postpaid
from:
Serenity Weavers
111 West 7th
Eugene, OR 97401
or Whole Earth





Finished Loom—Swedish

CRAFT

Shuttle, Spindle & Dyepot

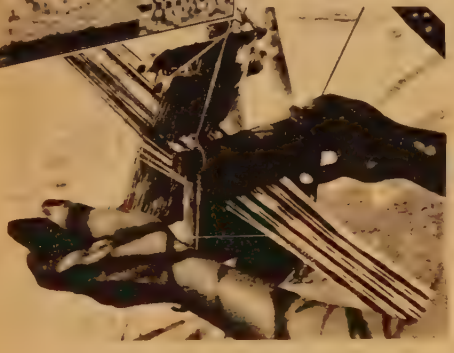
Four times a year this amazing array of "how-to's," ideas, photographs, and diagrams will arrive on your doorstep. It's the quarterly journal of the Handweavers Guild of America. A smattering of what's included regularly:

Photos & reviews of current exhibits
New dyestuffs, how to use them
A product test and report section
Working drawings for spinning wheels, looms, & sundry rare devices
Suppliers, ads, book reviews, programs for study groups.

The information is great. I love it, and can't wait for it to arrive.

—DS

Shuttle, Spindle & Dyepot
Julienne Krasnoff, Ed.
Four times a year (Mar., June., Sept., Dec.); 90pp.
$7.00/yr
from:
The Handweavers Guild of America
1013 Farmington Ave.
West Hartford, CT 06107



Membership which includes your subscription is $7.00/year and also entitles you to attend the biennial conference (with exhibits, seminars, and workshops) at reduced fees.

•

The World Crafts Council has just published a World Crafts Directory which covers museums, schools and other pertinent craft information in 93 countries, seventy-six of which are member countries of WCC. Requests for further information will gladly be answered by the staff at headquarters of the World Crafts Council, 29 West 53rd Street, New York, NY 10019.

Cream Rises
WEAVING

Textiles of Ancient Peru *Tour-de-force* **563**
Techniques of Rug Weaving *Comprehensive, scholarly* **165**
Baskets as Textile Art *Eloquent, inspiring* **564**
Keep Me Warm One Night *Sumptuous coverlets* **570**
Byways in Handweaving *Advanced band weaving plaiting* **164**
New Key to Weaving *Basic manual* **164**
Shuttle, Spindle & Dyepot *Homey, information-packed* **562**
Working With the Wool *Navajo rugs* **563**
The Technique of Looms *Peter Collingwood returns* **569**
Ikat: an introduction *Japanese variations* **569**
Cardweaving *Advanced* **569**

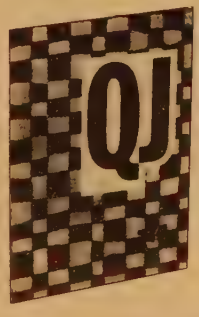
Falling Dogs

If you have trouble with a dog that falls from the ratchet wheel, try this simple remedy: insert two small eyehooks into the wood next to the ratchet and slide a nail through them to hold the ratchet in place. The nail can be easily removed when it is time to release the ratchet.

Quarterly Journal of the Guilds of Weavers, Spinners and Dyers

Also quarterly and by subscription, this sometimes quaint and quite technical journal. Its orientation is more toward excellence of traditional craftsmanship. Information is solid, book and exhibition reviews and the guild news is chatty and often irrelevant. I hoard my copies.

—DS



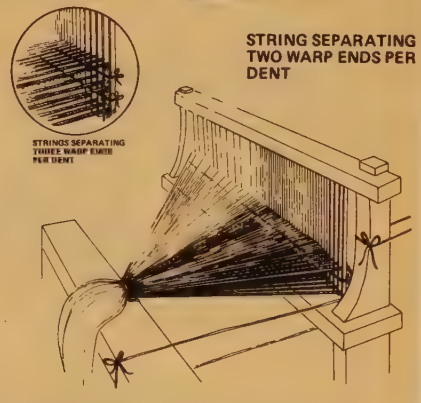
$2.50/year, send check or money order payable to
The Quarterly Journal
from:
Mrs. Win Evans
China Court
Church Lane
Petham
Canterbury, Kent Ct4 5rd
England

Warping All By Yourself

Cay Garrett has banished the last warping jitter. Learn to speed warp from the front of the loom, thread from the cross held in one hand, and then go from there using either her system or sharing the warp chain with a friend. Takes you inch by inch, crystal clear diagrams and text giving tips down to sighting, feel and body position at each step. For all levels from the barest novice.

—DS

Warping All By Yourself
Cay Garrett
1974; 160pp.
$2.95 postpaid
from:
Thresh Publications
443 Sebastopol Ave.
Santa Rosa, CA 95401
or Whole Earth



Pull the knot on the loop that ties the cross and find the one and only warp end (see arrow) that does not have another end in front of it between the "V" of the loop knot, working from the loose play in front of the knot. Then *draw that end out* from the loop tie.

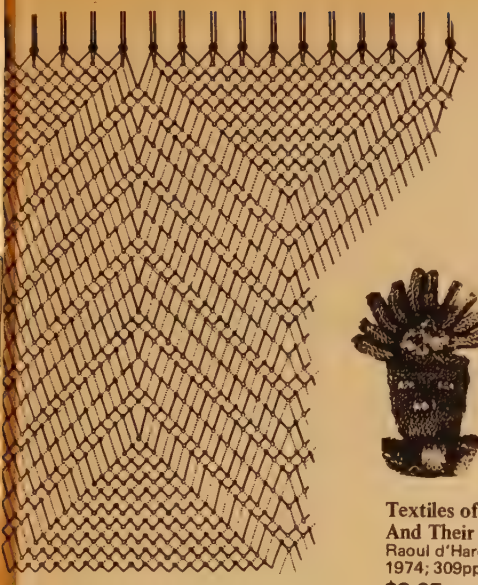
Keep holding the chain rather taut as you reach forward and separate this end from all of the others, all the way to the bundle tie on the breast beam.

NEW SOURCES-- YARNS, FIBRES, DYES, FLEECE

by Diana Sloat

See pages **167** *and* **170***— sources listed are still very good. Main changes: many now charge for samples, and you can no longer order direct from CUM.*

- Mairi MacIntyre, Ltd.
  Fort William
  Invernes-shire
  Scotland, England
  Wools— strong heather "knitting" yarns in lovely soft colors— samples free.
- The Needlewoman Shop
  146 Regent Street
  London W.I. England
  Embroidery cotton, good colors, good sheen. Send for catalog— there will be a charge for samples.
- Bergit Ullman, Inc.
  Box 831
  Ossining, NY 10562
  Sample kits: good range of colors & textures Linen yarns—$2.50 (Holma Helsinglands) Weaving yarns— $3.50 Knitting yarns— $2.50
- Mary Pendleton Handweavers
  Box 233
  Sedona, Arizona 86336
  Navajo roving and handspun yarns— natural colors & dyed. Sold by ounce. Sample card free.
- Tahki Imports, Ltd.
  336 West End Ave.
  New York, NY 10023
  Wide range weights & colors of handspun & Irish tweed.
- Creative Handweavers
  P.O. Box 26480
  Los Angeles, CA 90026
  $1.00— Sample Set I— Wool, animal hair yarn, human hair, afghanistan handspun $1.00— Sample Set II— Palm yarn, jute, handspun Turkish cotton. Fascinating list, service spotty in past.
- Naturalcraft
  2199 Bancroft Way
  Berkeley, CA 94704
  Unusual fibres, yarns, cordage, feathers, etc. Large selection. Catalog & samples— $1.00.
- Straw Into Gold
  5509 College Ave.
  Oakland, CA 94618
  Best source of raw natural fibres for spinning, basketry, weaving & dyeing. Frequently updated catalog (50¢) with extensive list of samples cards available for 25-45¢ each. Caring people.
- The Yarn Depot
  545 Sutter Street
  San Francisco, CA 94102
  Sumptious colors— paternayan and marks yarns for weaving, knitting. Samples $1.50.
- Ft. Crailo Yarns Co.
  2 Green St. Dept. 3
  Rensselaer, NY 12144
  Weaving yarns: good color range, quick service, good cow-hair like rug yarn. $1.00 wool samples, $ .50 cotton.
- Stavros Kouyoumoutzakis
  Workshop Spun Wools
  166 Kalokerinou Ave
  Iraklion, Crete
  Greece
  Handspun wools, goathair, natural and dyed. Prices range $2.80-$3.00/lb. including postage and insurance.
- The Sheep Village
  2005 Bridgeway
  Sausalito, CA 94965
  Spinning & dyeing supplies, camel & yak hairs, alpaca, silk angora, fleece. Catalog 25¢.
- Nantucket Needleworks
  11 South Water St.
  Nantucket Island, MA 02554
  Catalog $2.50, samples $3.00 postpaid. Exquisite colors in needlework yarns. Doing business with them is a pleasure.
- Stephen Ballinger
  British Wool Mktg. Board
  Oak Mills, Station Rd.
  Clayton, Bradford
  England
  Sell only complete fleeces— Approx. cost $ .75— $1.00/lb + postage & handling. (When ordering do not send money.)
- Haber Zemel Tryon, Inc.
  325 Harbor Way
  So. San Francisco, CA 9408
  White, black or grey fleece $1.50/lb by the fleece. New Zealand & white top sold by lb. $2.50-$3.00/lb.
- C. D. Fitz Harding-Bailey **(Pg. 167)**
  Fleece samples $6.50 air; $5.50 surface.
- Wide World of Herbs, Ltd.
  11 St. Catherine St. East
  Montreal, Canada
  H2X1K3
  Incredible list of botanicals, for medicinal purposes, and for dyeing. Also have the mordants for them. Indigo in crystals. Catalog free.
- Earth Guild/Grateful Union
  149 Putnam Ave.
  Cambridge, MA 02139
  Raw materials for spinning, dyeing, weaving. Catalog informative & delightful, $1.00

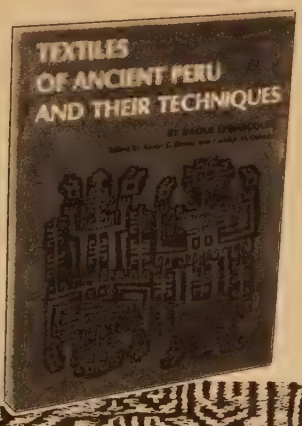


Textiles of Ancient Peru And Their Techniques

An extraordinary book on an extraordinary subject. Divided into three sections: Woven Fabrics, Non-woven Fabrics (such as plaiting, network, felt) and Ornamentation and Trimming of Fabrics (includes embroideries). Clear diagrams and explanation of techniques of pre-Columbian weaving, and a multitude of exciting photographs of Peruvian textiles. All depth, richness, inspiration! If I could have but one book on textile arts, this would be it.

—Sarah Kahn

Textiles of Ancient Peru And Their Techniques
Raoul d'Harcourt
1974; 309pp.
$8.95 postpaid
from:
The University of Washington Press
Seattle, WA 98105
or Whole Earth



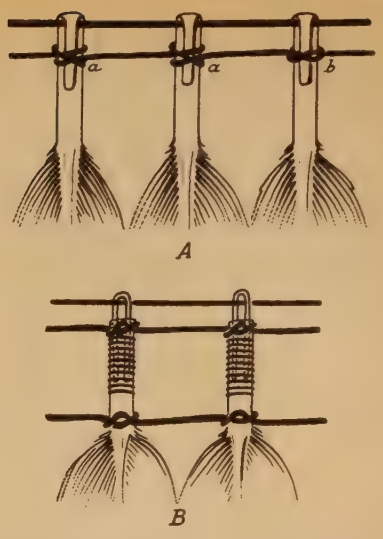


Figure 96. Methods of fastening feathers for imbricating on cloth in overlapping rows. A: fine feathers with folded quills; a, knot with two loops; b, simple knot; B: coarse feathers with tapered quills provided with a small terminal loop; two small cords fasten the quills and keep them separate.

To my knowledge, no archeological discovery, and no evidence contemporary with the Conquest, permits the assertion that the ancient Peruvians used any instrument other than a needle with an eye for joining yarns to each other or to a fabric. Crochet hooks and knitting needles seem to have been unknown. There were needles with eyes in both curved and straight shapes, of metal, of fishbone, of wood, and of thorns. Some of them must have been very fine, suitable for the close work that still arouses our admiration today.

CRAFT

Working With The Wool

An outstanding resource book for any and everyone interested in Navajo weaving techniques. . . everything you need to know (including supplier lists). Wish it had some illustrations of Navajo rugs.

I've watched my neighbor, who has never before woven so much as a potholder, build herself a loom, (ignore the 'think small' advice for beginners), warp, weave and finish a simple, beautiful 3x5 rug. . . with no guide but this book!

—Daphne Stewart

Working With the Wool
(How to Weave a Navajo Rug)
Noel Bennett & Tiana Bighorse
1971; 105pp.
$4.95 postpaid
from:
Northland Press
Flagstaff, AZ 86001
or Whole Earth

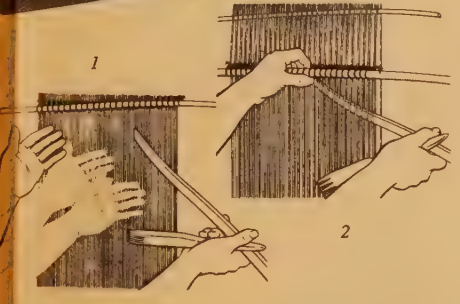


Figure 19: Position of batten, ready for insertion. Strumming technique to separate warps. (Note position of fork when not in use.)

Indian Blankets and Their Makers
Weaving a Navajo Blanket

Navajo "rugs"? Two fine old books, George Wharton James' **Indian Blankets and Their Makers** *(1914), and Gladys Reichard's* **Navajo Shepherd and Weaver** *(1936) have been reprinted. James' history is full of photographs (32 in color), diagrams of traditional designs, and includes Hopi, Zuni and Chimayó work as well as Navajo. Reichard's focus is Navajo techniques, weft & warp. Fewer but well-chosen photographs and diagrams illustrate process and equipment. Valuable supplements to* **Working With the Wool.**

—DS

Indian Blankets and Their Makers
George Wharton James
1974; 213pp.
$5.00 postpaid

Weaving a Navajo Blanket
[Formerly **Navajo Shepherd & Weaver***]*
Gladys A. Reichard
1974; 222pp.
$3.00 postpaid
both from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014

Equally fine and interesting on the same subject:
Noel Bennett has pamphlets on more advanced Navajo weaving techniques. Write:

Living Designs
313 So. Murphy Ave.
Sunnyvale, CA 94086

•

Best book on Navajo natural dyeing is **Navajo Native Dyes,** *available from Publications Service, Haskell Institute (see "Access to books" pg.* 564*).*

•

And a beautifully done poster on Navajo dye plants is published by the Los Angeles County Museum of Natural History. In lovely subtle colors gives plant, yarn color and focuses in on the color used in a woven blanket.

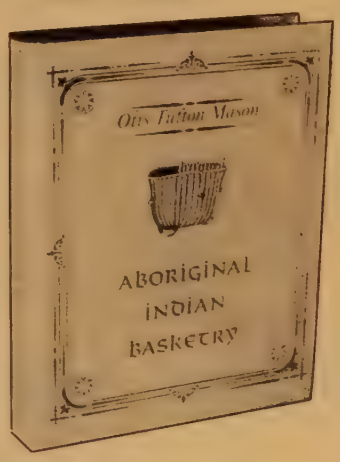
$4.00 postpaid
from:
Book Shop
L.A. County Museum of Natural History
900 Exposition Blvd.
Los Angeles, CA 90007

A Hopi Weaver at Oraibi.

Aboriginal Indian Basketry

For those interested in American Indian basketry there is one thorough classic originally published as **Aboriginal American Basketry: Studies in a Textile Art Without Machinery** *(1902), with 248 plates, 48 in color. It's hard to say a few words about this book—— it's very thorough. A sampling of what is covered: materials by Latin and common names, basket making symbolism, uses and ethnic varieties from all over the Americas. There are photographs of many basket types and of Indian women with their work. Although there are no "instructions," experienced basket makers will find inspiration and ideas from illustrations and line drawings. (I might mention that this and all the Rio Grande books are large with sturdy bindings and washable covers. They will hold up well as reference books.)*

—Susan Druding Jones



Aboriginal Indian Basketry
Otis Tufton Mason
1972; 592pp.
$25.00 postpaid
from:
Rio Grande Press, Inc.
La Casa Escuele
Glorieta, NM 87535
or Whole Earth

In a small area on Fraser River, in southwestern Canada, on the upper waters of the Columbia, and in many Salishan tribes of northwestern Washington, basketry, called imbricated, is made. The foundation, as said, is in cedar or spruce root, while the sewing is done with the outer and tough portion of the root; the stitches pass over the upper bundle of splints and are locked with those underneath. On

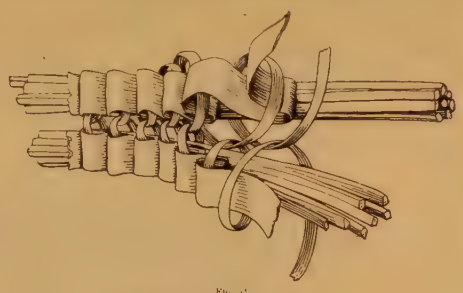
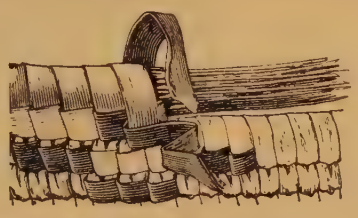


Fig. 51
IMBRICATED WORK DETAIL, CALLED KLIKITAT.
Showing method of concealing coil stitches.

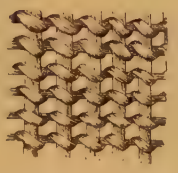
the outside of these baskets is a form of technic, which also constitutes the ornamentation. It is not something added,



or overlaid, or sewed on, but is a part of the texture effected in the progress of the manufacture. (See fig. 52.)

Cream Rises
BASKETRY

Baskets as Textile Art *Beauty & utility* 564
Aboriginal Indian Baskets
The thorough reference 564
Earth Basketry *Most information* 565
Crafts of the North American Indian
Includes splintwork & birchbark 547
Basketry *Basic but scouty* 171

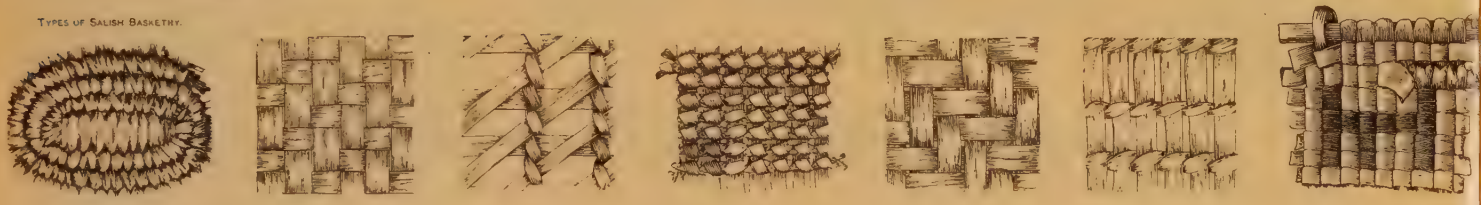


The method of adding this ornamentation in strips of che bark, cedar bast, and grass stems, dyed with Oregon grape is unique, and on this account I have applied the term "imbricated" to the style of weave here shown.

The strip of colored bark or grass is laid down and caught under a passing stitch; before another stitch is taken this one is bent forward to cover the last stitch, doubled on itself so as to be underneath the next stitch, and so with each one it is bent backward and forward so that the sewing is entirely concealed, forming a sort of "knife plaiting."

CRAFT

TYPES OF SALISH BASKETRY.



Indian Basket Weaving
Earth Basketry

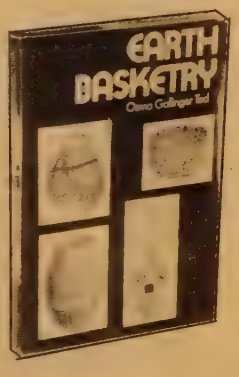
When recommending books to my students I usually suggest these:

Basketry (Pg. 171)
Indian Basket Weaving
Earth Basketry

The first two cover use of reeds, cane, rush, raffia, etc., (purchased materials). Most of these older technique books have a slightly "scouty" look to the projects. However the illustrations and basic instructions are clear.
Indian Basket Weaving *(originally published 1903) elaborates further on coiled and twined weaves and includes use of feathers, beads, etc., for surface decoration.*

Earth Basketry *I recommend highly if you are into using natural materials you can gather. Ms. Tod covers purchased materials but also gives information on preparing honeysuckle vines, grasses, willow rods, splints, pine needles, etc. A chapter lists 103 plants used by the Indians in basketry, where in the U.S. they grow, where to find and how to prepare them. Instructions for varieties of coiling and twining stitches are complete, with diagrams located close to the text describing the technique. There's even a chapter on basket birdhouses.*

—Susan Druding Jones

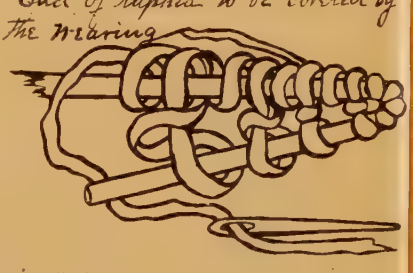


Earth Basketry
Osma Gallinger Tod
1972; 169pp.
$2.50 postpaid
from:
Crown Publishers
419 Park Ave. So.
New York, NY 10022
or Whole Earth

Indian Basket Weaving
Navajo School of Indian Basketry
1971; 104 pp.
$1.75 postpaid
from:
Dover Publications, Inc.
180 Varick St.,
New York, NY 10014
or Whole Earth

Take the reed in both hands and at the point marked off, bend it very slowly and carefully into a bowl of hot water, holding there fully five minutes.

Take the reed out and gently bend it, working with the fingers until you can bring the reeds together without breaking. Do not be dismayed should it split a little. It will do no harm, as it is covered with raphia. In our general directions for setting up an oval basket, we say so the reeds *one* hour, in hot water, which is perhaps the better way until one has become more accustomed to handling the reeds. Some of our more experienced worke do not leave the reeds more than five minutes in very hot water, but they draw them through the fingers until they become quite pliable, and it really becomes optional with the workers in what manner they prepare the reeds after having had just about so much experience.



Showing Method of Commencing the Mariposa Weave.

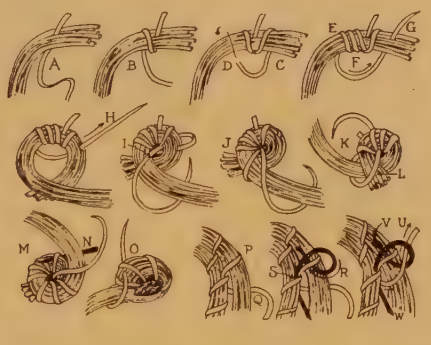
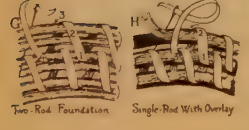
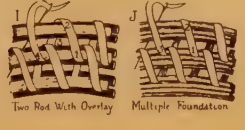


FIGURE 47—STARTING A COILED GRASS CENTER. *Below right,* PIECING THE SEWING STRAND

Grasses and Stems

Beach Grass—— (Eastern Coast as far as N. and S. Carolin Split white stems make coarse patterns in spruce root baskets.
Brome Grass—— (Western Canada) Split white stems used for patterns in split root baskets.
Broom Corn—— (Cultivated, mainly central West) Seed heads of broom corn and other sorghums are borne on lo fine straw-like stems that make bundles for coiled basket Several strands laid side by side may take place of a flat weaver to be used for plaiting.
Cane—— (Cultivated, southern states) Strips cut from ou stalk make flat plaiting material. Fine split strands used a weavers over spokes. A slight blow crushes the large gras like stalk, the spongy pith is scraped away and the outer strips or splints are ready for use.





Baskets as Textile Art

Susan Druding Jones recommends Jack Lenor Larsen's eloquent review from **Craft Horizon**, *Dec. 1973, Pg. 15, as the best introduction to this book.*

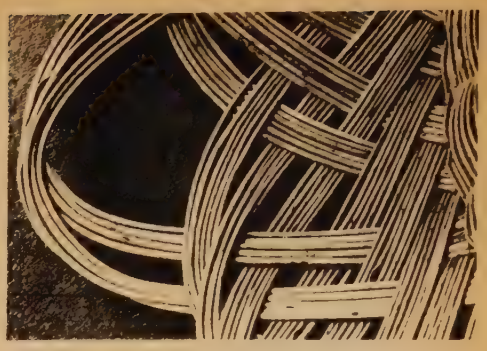
America's great voice in the fiber medium has written a first book which is surely a masterpiece. To ensuing generations of weavers, **Baskets as Textile Art** *may be as much a wellspring of inspiration as Raoul d'Harcourt's* **Textiles of Ancient Peru and Their Techniques** *has been to all weavers, since its original publication in 1934. Unlike the original d'Harcourt, Rossback's book is in English, is in sizable printing, and is not expensive. It is a credit to its publisher and to craftsmanship as a profession.*

Baskets as Textile Art *is an excellent book, a serious book, but not at all difficult to comprehend. The words flow easily and as unstilted as conversation. Not glib, not studied, this is the vital concern of a knowing, caring man. This man is, even before publication, the only inquisitive, reflective researcher and philosopher in the fiber medium to compare with the durable greatness of Anni Albers. As such, the book is meaningful even to that reader who starts caring nothing and ends caring nothing for baskets."*

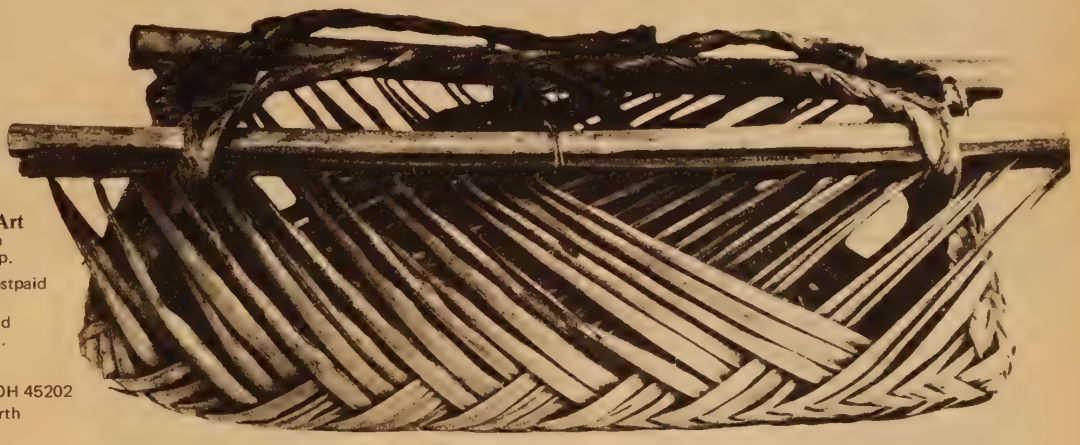
Baskets continually illuminate the gains and losses of technological progress, and the sharpness of the struggle between man and the machine. We know that baskets can be made only in underdeveloped areas where hand production is still feasible, and that the eagerly awaited industrial development, when it comes, must end the tradition of basketmaking. The sensuous delights of using baskets— of using something man-made that was used constantly from prehistoric times of hunting and gathering— will be lost to our successors. And basketmaking will, finally, change to become something else than it has always been. It will become an art, like hand-weaving today in our machine society, practiced by a few as individual expression.

•

Pleasure can be derived from observing how the vigorous, flowing curves, which some materials take naturally, are used for handles; how the smooth surface of materials is kept where it must be touched in using the basket; how fragile grasses of especially desired colors are placed sparingly as accents among sturdier materials; how elements are forced to radiate from a center without causing bulkiness and yet without leaving holes; how willow is placed so that its natural curve works with the curve of the basket; how elements strong enough to serve as a base are replaced by more fragile and pliable elements when the direction changes in forming the sides; how the weave and materials vary from one part of a basket to another for reasons sometimes structural, sometimes decorative.



Baskets as Textile Art
Ed Rossbach
1973; 144 pp.
$14.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth



Plaited palm basket, Ponape, Micronesia. The palm leaflets are left free, to be held in plaiting only along the base of the basket. The plaiting is brought up as sides, and then carried through the rim to act as handles.

CRAFT

Indian Basketry

Good historical coverage of southwest and Pacific Coast Indian Baskets. Waxes a little romantic. . . (originally published 1909). (It's also available with **How to Make Indian and Other Baskets** *in hardcover. The "how to" section covers many techniques but none in great detail. Diagrams good but text not exceptional.)*

—Susan Druding Jones

Indian Basketry
George Wharton James
1972; 271 pp.
$3.50 postpaid
from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014
or Whole Earth

Pima Coiled Basket with Ornament Arranged in Zig-Zag Rays.

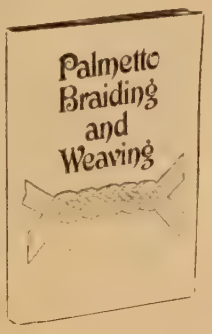
Indian Basketry and How to Make Indian and Other Baskets
George Wharton James
1971; 413 pp.
$12.50 postpaid
from:
Rio Grande Press, Inc.
La Casa Escuele
Glorieta, NM 87535
or Whole Earth

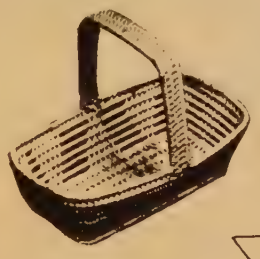
Palmetto Braiding & Weaving

An interesting little book on braiding all types of palm leaves for baskets, purses, hats and sandals. Includes rushes, sedges, cattail and yucca as well. I found the instructions for making a basket from a single palm leaf intriguing.

—Susan Druding Jones

Palmetto Braiding and Weaving
Viva Cooke and Julia Sampley
1947; 127 pp.
$5.95 postpaid
from:
E.A. Seemann Publishing, Inc.
P.O. Box K.
Miami, FL 33156
or Whole Earth





Modern Basketry From the Start

Very thorough if you want to do willow work. Not innovative. Diagrams extremely clear.

—Susan Druding Jones

Modern Basketry from the Start
Barbara Maynard
1973; 172 pp.
$10.00 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

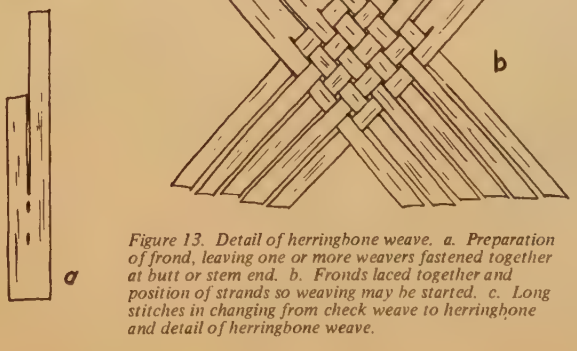


Figure 13. Detail of herringbone weave. a. Preparation of frond, leaving one or more weavers fastened together at butt or stem end. b. Fronds laced together and position of strands so weaving may be started. c. Long stitches in changing from check weave to herringbone and detail of herringbone weave.

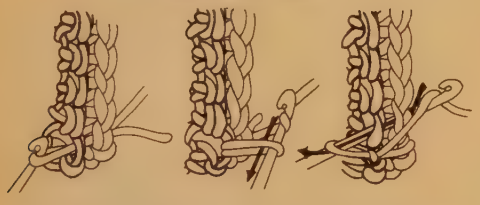
Creative Crochet

If you buy only one book on crochet, this is the one to buy. No matter what your approach is to crochet, as a craftsman, as an artist, as a designer, as a homemaker, or if you just want to make your boyfriend a vest, you will be satisfied and inspired. A beginner can learn about fibers, hook sizes, basic equipment, basic stitches, pattern making, blocking, geometric and amorphic shaping and finishing, through many photographs and clearly organized drawings and diagrams. There is a series of suggested samples, each one drawing something from the one before. By the time you've finished the series, the technique of crochet is yours. For the advanced textile person, the infinity of creative possibilities of this medium is exposed through fancy and complex stitches, 2 dimensional and 3 dimensional design and shaping exercises, work with beads, leather, fleece, junk, lace, tapestry technique and combinations with other media. There are color photographs showing the work of contemporary costume makers, ranging from conservative and sophisticated to the most bizarre sculptural works of art for the body. A fantastic and complete list of yarn sources too.

—Marika Contompasis

Creative Crochet
Nicki Hitz Edson and Arlene Stimmel
1973; 143pp.
$10.75 postpaid
from:
Watson-Guptill Publications
2160 Patterson St.
Cincinnati, OH 45214
or Whole Earth

Joining Two Pieces of Crochet



Slip Stitch Method. Step 1. First lay the 2 pieces together with the right sides facing each other. Then attach the joining yarn and pull a loop through.

Step 2. Yarn over and pull the yarn through in the direction of the arrow. Hold onto the loose end to make sure it doesn't slip through.

Step 3. Insert the hook through the tops of both stitches, yarn over, and pull the yarn through the loop in the direction of the arrow. This makes 1 slip stitch. When you join with slip stitches it's very important to keep the stitches loose so the work doesn't buckle. Continue the join, matching stitch for stitch. At the end of the piece, break off the yarn and secure it.

Sleeve Detail of Vest by Dina Schwartz. This unusually shaped sleeve is draped from the shoulder and not connected anywhere else. It was worked in mohair, wool, and metallics.

Cream Rises
CROCHET

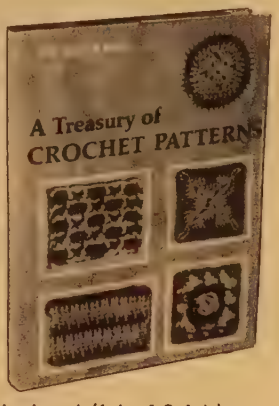
Creative Crochet *Best book for all levels* 566
Crochet, Discovery & Design
Clothing, innovative 566
Complete Book of Crochet
Old fashioned thesaurus 566
A Treasury of Crochet Patterns
The advanced reference 566
Encyclopedia of Needlework
The friendly giant 571

A Treasury of Crochet Patterns

If you are already a creative crocheter and understand the process of forming your own ideas and turning them into garments, blankets, rugs, wall-hangings and sculpture, this book is valuable. It is a dictionary of nearly 400 crochet patterns logically organized, each with full directions and accompanied by a photograph. The interpretations of single crochet, double crochet, raised work, lace, shells, loops, clusters, motifs, mesh, afgan stitches, insertions and edgings are useful and inspiring to the practiced, enthusiastic crocheter.

—Marika Contompasis

A Treasury of Crochet Patterns
Liz Blackwell
1971; 213pp.
$12.50 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth



Chain 6 (narrow end).

Row 1: In 6th ch from hook work (1 dc, ch 2, 1 dc). Ch 5, turn.
Row 2: Under ch-2 work (1 dc, ch 2, 1 dc) group. Ch 5, turn.
Rep Row 2 to desired length. (There must be multiple of 4 groups plus 3). Ch 2, do NOT turn.

Row 1: *In next ch-5 loop work (4 dc, ch 3, 4 dc); rep from *, ending 4 dc in last ch-5 on this side. Ch 1, turn.
Row 2: 1 sc in first dc, *ch 5, 1 sc in next ch-3 sp; rep from *, ending 1 sc in last sp, ch 3, 1 dc in last dc. Fasten off.

With right side facing, join yarn in first ch-5 loop on opposite edge and work to correspond. Fasten off.

The Complete Book of Crochet

You can't tell a book by it's cover! Although this book seems like absolute 40's funk, it is more jammed packed with technique than any book to date. It comes from a time when many women softened their environments and dispositions with their textile hobbies. There are tons of crocheted trimmings, beautiful interlocking geometric motifs, a whole chapter on pineapple lace and many interesting, thick, textural stitches all waiting to be interpreted through the eyes of the 70's.

—Marika Contompasis

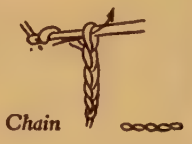
The Complete Book of Crochet
Elizabeth L. Mathieson
1946; 287 pp.
OUT OF PRINT
Greystone Press
31 West 57th St.
New York, NY
(Check your library)

Crochet Discovery and Design

Del Pitt Feldman's book is also a book from which you can really learn to crochet. It makes a transition from the traditional, intricate lace work made with thread-thin yarn, to the very loose, uninhibited approach popular today. However, there is no loss of integrity of craftsmanship or perfection of technique for the sake of freedom. Stitches are explained in a crochet vocabulary of abbreviations and the popularly used notations. And for those of us not as word oriented, a diagrammatic notation which is easy to understand visually explains basic and fancy stitches and important shaping concepts. If you want to crochet clothing, this book will teach you the process, from measuring the body, making a pattern, combining many crochet techniques, fitting the work to the pattern, sewing your pieces together and blocking the finished work.

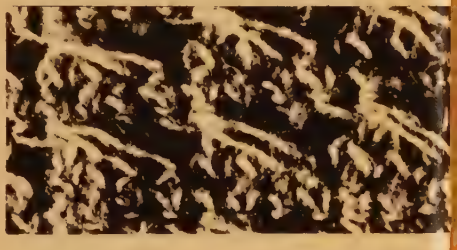
—Marika Contompasis

Crochet
(Discovery and Design)
Del Pitt Feldman
1972; 96pp.
$3.95 postpaid
from:
Doubleday & Company, Inc.
501 Franklin Ave.
Garden City, L.I., NY 11530
or Whole Earth



Half double crochet

Single crochet



The Adventurous Crocheter

If you are not a professional craftsman or textile artist, but find crochet a relaxing, productive hobby, you might like this book. It will teach you to crochet belts, sweaters, skirts, afgans, within the range of basic stitches. Although real creativity is not stressed, there is a beauty in the way many different garments and designs are structured by the re-arrangement of basic square, triangular, and circular moduals. You won't learn technical perfection or be inspired to create a work of art, but I think you can get the feeling for successfully making something with your hands that can be used to cover part of you or your house.

—Marika Contompasis

The Adventurous Crocheter
Delia Brock and Lorraine Bodger
1972; 286pp.
$3.95 postpaid
from:
Simon and Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

The Complete Book of Knitting

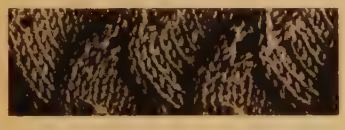
A great source of help and information. Guides the beginner in the selection of equipment and the right yarn to go along with it. The instructions and sketches carefully cover everything from casting on, several ways to increase, decrease, to the common problems beginning knitters face. The advanced knitter will enjoy the many varied methods discussed, the interpretations of foreign language patterns and the fine notes on how to measure and tailor-finish your articles. To put all you will learn to good use the author adds a great number of unusual pattern stitches with instructions.

—Barbara Erfani

The Complete Book of Knitting
Barbara Abbey
1971; 239 pp.
$3.95 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

THE MOST IMPORTANT FACTOR IN THE FIT ON ANY KNITTED GARMENT IS *CORRECT GAUGE TIMES CORRECT MEASUREMENT.*

The *only* way to determine *your* gauge is to make a swatch (sample of knitting), using the *same stitch, same color,* and the *same kind of yarn*. Also, the swatch *must* be made on the *same size needles* you plan to use in the main part of the knitted piece. To get the best gauge, make a piece about four inches square. The number of sts *across* is your *stitch gauge* and the number of rows up and down is your *row gauge*. If the pattern stitch is not a lace one, but a type of fabric stitch, do not bind off, but remove the knitting from the needle. If it *is* a lace stitch, bind off loosely.



Smooth out the knitting or steam-press it lightly without stretching it (follow the advice given after each of the pattern stitches), and place your Knit-Check or a small transparent ruler across the *center* of the work. Count the number of sts in *two full inches* of the swatch. Half of this number will make up *your gauge* for one inch. The two inches may have an odd number of sts, leaving you with a half stitch to contend with when multiplying. DO NOT UNDERESTIMATE THE VALUE OF THIS HALF STITCH. This little half stitch becomes of the utmost importance when multiplied by the measurement. As an example: If you multiply your waistline (try 30" for a round number), times 7½ sts (if you measured 15 sts in the 2"), you get 225 sts. Now, multiply 30" by 8 sts (if you measured 16 sts in the 2") and you get 240 sts. The result is a difference of 15 sts—*two whole inches*! This makes a big difference in the number of stitches to be made, the amount of yarn to be used, the knitting time, and also in the finished size, which is the most important factor.

Cream Rises
KNITTING

Complete Book of Knitting *All levels* 567
A Second Treasury of Knitting Patterns *Advanced ideas* 567
Complete book of Progressive Knitting *Create patterns* 171

A Second Treasury of Knitting Patterns

Page after page of exquisite, unusual patterns. The patterns are grouped into several categories and are preceded by a general description of the patterns and how to knit them. Instructions deal with the usual knitting terms and abbreviations, and include a short paragraph describing some of the pattern's possible uses. The book also contains a short chapter on adapting the patterns to circular knitting. To fully enjoy and use this book basic knitting skills are definitely needed.

—Barbara Erfani

A Second Treasury of Knitting Patterns
Barbara G. Walker
1970; 398pp.
$15.00 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

The Castle

To delight a child, work this bit of fairy-tale architecture on the front of his or her sweater! The Castle is made of a combination of easy knitting techniques. There is a lace door, there are windows of faggoting and picot eyelets, ribbed battlements with an openwork banner floating above them, and a twist-stitch tower topped with a bobble. The entire pattern is a good example of "picture knitting": much less complicated than its lengthy directions seem to indicate, and great fun to work.

•

Directions as given will make a long loop fringe. A thicker fringe can be made by using three or four strands of yarn instead of two; a shorter fringe can be made by reducing the 6 stitches at the end of Row 1 to 3 or 4, and of course the 5 stitches at the beginning of Row 2 to 2 or 3. Conversely, a longer fringe is made simply by

adding more stitches. In any case the stitches to be unraveled for the fringe are worked in plain stockinette stitch, while the edging stitches are done in faggoting. If a straight fringe is wanted instead of a loop fringe, each loop may be cut at the bottom.

Two category sections from A Second Treasury of Knitting Patterns *are now available in paperback.*

—DS

The Craft of Cable-Stitch Knitting
Barbara G. Walker
1971; 128pp.
$2.95 postpaid

The Craft of Lace Knitting
Barbara G. Walker
1971; 128pp.
$2.95 postpaid

both from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

Dayflower

Three Cables with Irish Knots

quote from lace knitting:

The old-time knitters were not *always* right. Here is a revised version of a lovely 19th-century pattern which was so badly botched in its original form that its graceful lines were scarcely discernible. Probably one reason for its having lain so long in obscurity was the disappointing result given by the original directions. These new directions, however, are guaranteed to please. Two panels are shown side by side, sharing the same two edge stitches between them (a total of 36 sts). Notice that these edge stitches are drawn into gentle waves by the bias pull of the pattern. Any number of Dayflower panels can be set together like this, to make an extremely pretty allover lace.

quote from cable-stitch knitting:

Though these three cables are quite diverse in appearance, all three are decorated with Irish Knots, single or in clusters. Hollow Oak and Lorgnette Cable are fairly straightforward patterns, with no tricks about them except their own special brand of novelty. But the knitter who uses Crazy Maypole must watch what she is doing. It is an off-center, free-swinging sort of pattern incorporating knots, twists, and an "inside-out" cable cross in which one knit stitch is crossed in front of two purl stitches— the reverse of the usual system. In spite of its apparent eccentricity, the Maypole is a highly disciplined design, consistent with its own internal symmetry; the second half of the pattern is the exact opposite, in every detail, of the first half.

The Manly Art of Knitting

This booklet reminds me of a friend, he never lacked space on a crowded bus. As soon as he pulled out his knitting everyone just sort of inched away. This happened for years and I truly hope the printing of this book is a sign of change. The patterns are hilarious, especially the hammock, supposed to be knitted with pool cues!! The instructions are very basic indeed.

—Barbara Erfani

To get the feel of needles and yarn, you should start by knitting something for someone uncritical. Your dog won't mind a small blanket with an irregular shape and unusual stitches. Many people stop knitting before they start, disappointed by their first project's lack of perfection. Just as when you first started to use a hammer, you hit your thumb, when you first start to knit you will make mistakes.

Using size 13 needles and heavy rug yarn, cast on 50 stitches for a small dog, 75 stitches for a medium dog, or 100 stitches for a large dog. Work in the Garter Pattern (that is, Knit every row) until you feel it is long enough for your dog. Bind off, and weave in yarn ends.

The Manly Art of Knitting
Dave Fougner
1972; 64 pp.
$1.95 postpaid
from:
Threshold
443 Sebastopol Ave.
Santa Rosa, CA 95401
or Whole Earth

The Perl Stitch

Coming from the front with the right needle, go through the first stitch and over the left needle.

Bring the yarn over and around the right needle.

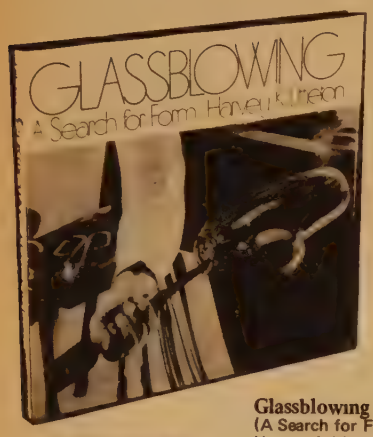
Bring the right needle back and then push it under the left needle.

Pull the right needle to the right, slipping the stitch off the left needle. Repeat as necessary.

Glassblowing: A Search for Form

A beautiful book: sensuous, alive, fascinating. Its easy narrative form involves the reader in the history and nature of glass, in tools, studios, furnaces, techniques of blowing, safety, even bibliography. Though in many ways a reference, the tone and sense of the book is of sharing in the growth of a man's art; it teaches through the chronicle of his experimentation, the day-to-day setbacks and discoveries, illustrated with detailed and beautiful photo-sequences of an artist and master craftsman at work in a small studio. It's a magnificent experience.

—DS



Glassblowing
(A Search for Form)
Harvey J. Littleton
1971; 143pp.
$14.95 postpaid
from:
Van Nostrand-Reinhold Co.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

When I return with the hot glass from the furnace to the bench, I cannot take my eyes off it. I must sit down and place the pipe on the arms of the bench and reach for the wet block, all without ceasing to watch the glass, turning the pipe to keep the gather centered and tipping the end up or down to distribute the glass and control the shape before the block slowly comes up to the ball of the glass. In blocking, the wood itself never actually touches the glass. There is a layer of superheated steam between the block and the glass, the wet carbon from the charred surface of the block preventing the glass and wood from sticking. If the block dries out too much, the glass will stick and tiny bits of carbon are often stuck to the glass, causing bubbles or dirty marks where the ash is left on the glass.

Blocking both chills and evens up the surface. It is for me a beautiful movement, light and easy, just coaxing the hot glass over the surface of the colder glass underneath to distribute it in an even layer, perhaps making the base thicker or lengthening the form. By tipping the pipe to let gravity help at this point, the glass outside is slowly cooler while the cooler glass inside is heated. It is now a lovely rosy orange color which is alive in its movement; the slightest breath in the pipe will swell out the form. If another gather is necessary, it is the same process all over again, now on a larger scale.

Quilts & Coverlets

This book is the best book dealing with the work of contemporary quiltmakers. It does not deal with pieced or applique quilts in the traditional sense but inspires people to create their own patterns and designs, to see quilts as vehicles for doing fabric paintings. There are many untraditional ways of making quilts discussed as "pre-stuffed quilts."

—Joan Lintault

Quilts & Coverlets
(A Contemporary Approach)
Jean Ray Laury
1970, 128pp.
$9.95 postpaid
from:
Van Nostrand-Reinhold Co.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

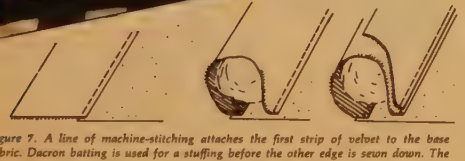


Figure 7. A line of machine-stitching attaches the first strip of velvet to the base fabric. Dacron batting is used for a stuffing before the other edge is sewn down. The second strip is then placed over the edge of the first.

Native Funk & Flash

A dazzler for the thread-butchers. 200 fine color photos of what unfettered imagination and skill can do—— cover naked body (house, wall, thing) with naked mind, sally forth and stop traffic.

—SB

[Suggested by Ned Engle]

Native Funk & Flash
(An Emerging Folk Art)
Alexandra Jacopetti
1974; 110pp.
$7.50 postpaid
from:
The Scrimshaw Press
149 Ninth St.
San Francisco, CA 94103
or Whole Earth

The work in her lap is a skirt panel she's started. She inks in the general outlines with felt-tip pens and fills in with DMC cottons, No. 8-perle, and 3 strands of 6-strand floss. I defy anyone to find a glint of bedsheets peeping through those miles of satin stitch.

Mountain People, Mountain Crafts

Portrait of a way of life in the Appalachians, where craft grows from necessity and expresses its harmony, pride, grit and humor. A book to savor.

—DS

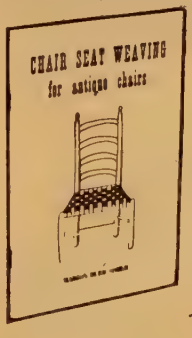
Mountain People, Mountain Crafts
Elinor Lander Horwitz
1974; 143pp.
$2.95 postpaid
from:
J. B. Lippincot Co.
East Washington Sq.
Philadelphia, PA 19105
or Whole Earth

"I never *ever* paid money to buy a broom," says Nannie Smallwood. "My mamma used to wash our cabin floor with a broom just like this one." She brings out a different type of broom—— an Appalachian hickory scrub broom, whittled from a strong straight hickory limb. Mr. Smallwood has been making them all his life. "When I was a child we didn't have no soap or detergent or anything we have today," his wife explains. "My mamma used to beat one rock with a bigger one until she had a bowlful of sand, then she spread it out on the wooden floor and wetted a scrub broom like this one and began to scrub. I tell you, the floor was just as white and clean as a plate."

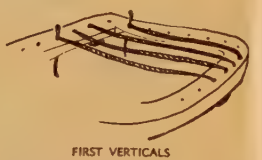
Chair Seat Weaving for Antique Chairs

With the leisurely pace of this delightful and inspiring little book you (and I) have no excuse for being intimidated by an empty chair seat—— not when it's so easily filled with cane, fibre cord, rush (cattail to most of us), splint or tape. Pragmatic and simple to follow instructions. There's a list of suppliers, instructions on gathering and curing your own, and lots of help with troubleshooting should it be needed.

—DS



Chair Seat Weaving for Antique Chairs
Marion Burr Sober
1964; 64pp.
$2.50 postpaid
from:
Marion Burr Sober
Box 294
Plymouth, MI 48170



Caning has never been a production line craft. There have never been any shortcuts or easy ways to speed up the craft It belongs with the age when the apprentices learned from masters and there was no time limit on learning—— just the goal of perfection. Don't set a date for finishing your chair and don't hurry the job. Let it progress slowly. Give yourself an hour or two a day for a week or so to work on it. Then you'll enjoy it, savor it. No rush, no pressure—— it's a novel feeling.

•

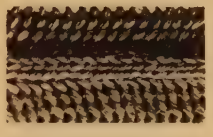
The mellowing of the rush takes about twenty-four hours before it is ready to be used. Select a good handful of leaves, line them up with tips (tops) and butt ends (bases) together, sprinkle well with water and wrap tightly in an old cotton blanket, towel or burlap, covering both ends of the rush. Sprinkle the wrapping until it is uniformly damp both top and bottom. Let the rush mellow overnight and it will probably be ready for use the next day. Sometimes the mellowing process can be for a shorter time, sometimes a whole day longer. The mellowing time depends upon the quality and age of the rush.

The Techniques of Sprang

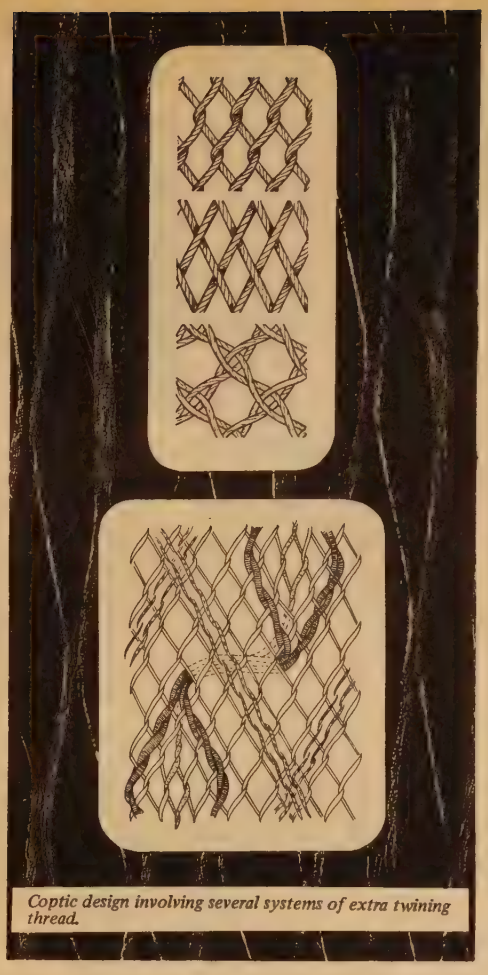
If you know Peter Collingwood's **Techniques of Rug Weaving** *(Pg. 165), you'll instantly recognize his companion volume on this age-old, little known but universally used method of finger-controlling the making of fabric and sculpture. You'll find the same mastery of technique and equipment, and the same understanding of fibre, its qualities, and the effects produced when it's used in particular ways, all painstakingly translated into description, diagrams, and photographs. Extensive scholarly bibliography and index included. As usual this man's ability to distill a wealth of information is awe-inspiring.*

—DS

The Techniques of Sprang
Peter Collingwood
1974; 324pp.
$25.00 postpaid
from:
Watson Guptil Pub.
2160 Patterson St.
Cincinnati, OH 45214
or Whole Earth



Sprang is a method of making fabric by manipulating the parallel threads of a warp that is fixed at both ends. The manipulation can take the form of interlinking, interlacing or intertwining of adjacent threads or groups of threads, see Fig. 1. Such structures do not require the addition of any other threads to stabilize them. The work is carried out row by row at one end of the warp. As an inevitable result of the warp being fixed at both ends, corresponding but contrary movements of the threads appear simultaneously at its other end.



Coptic design involving several systems of extra twining thread.

Ikat: An Introduction

At last, a thorough, well-written instruction manual for Japanese Ikat, the ancient technique of resist dyeing warp, weft threads or both, before weaving to create ghostly luminescent patterns in the woven fabric. All four basic types of ikat are covered, weft, warp, double, and weft figure. An excellent brief history and bibliography are included. Be forewarned: the booklet presupposes knowledge of basic weaving and dyeing techniques and terminology.

Instructions for calculating, warping and binding the pattern bundles are simple and clear. The special illustrated is dynamite: speedy and tight, yet unties easily with a sharp yank (a slip of the scissors in the center of your carefully bound, dipped and dried-8-times pattern is disastrous!) There are directions for a cold-water *indigo dye process which once it's made up, can stand in the vat and be roused over a two-month span. It produces dark, rich fast color on cotton or silk, a bit lighter on wool, and dyes up to 20 lbs of material. A note on materials: 1) The special nylon tape recommended for the bindings is faster and more convenient to use than other materials like raffia or string. It's about two inches wide, can readily be split into narrower strips, and shrinks with heat to even further tighten the resist areas. Results in sharper pattern. 2) The dye vat proportions are set for the Kasuri Dye Works indigo. (Straw into Gold's is similar and can be interchanged with it, Pg. 562). Since indigos do vary in strength depending on how much and what they're "cut" with, you may have to adjust the dye vat proportions to suit the indigo from your usual source.*

—DS

Ikat: An Introduction
Diane Ritch and
Yoshiko Wada
10pp
$2.25 postpaid
from:
Kasuri Dye Works
P.O. Box 7101
Berkeley, CA 94707
(tape and indigo
also available)
or Whole Earth

The Mortensen Spinning Wheel

I have spun on several wheels, but the Mortensen is my favorite. Made of solid birch with a natural finish, it has an especially heavy and well-balanced wheel; it doesn't have that "dead spot" many wheels do. Another really good feature is its large orifice which allows you to spin fat yarns as well as fine, and is also great for plying. For me, spinning is a pleasure on the finely crafted Mortensen wheel.

—Mary de Bone

The Mortensen Wheel
$150
from:
John Mortensen
P.O. Box 343
Berkeley, CA 94701

(Other handsome spinning & weaving equipment from John Mortensen: an English inkle loom that doubles as a warping board, a lucetta for making square braids, and a rope machine, a fascinating and efficient gadget for plying fibres into rope. Write for catalog. —DS)

The Nagy Wheel

A castle wheel with action so smooth it nearly spins itself. Made of Kauri wood, mahogany or walnut stained and superbly finished, it's guaranteed for the lifetime of the maker against faulty workmanship. It spins medium to fine yarns. Not as versatile as the Mortensen, much more expensive, but oh, so beautiful.

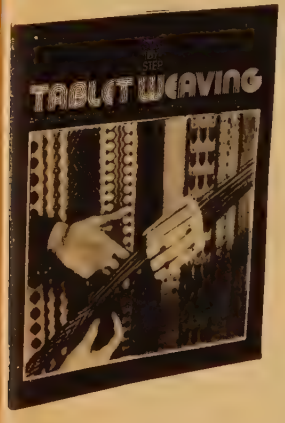
—DS

The Nagy Wheel
$225 plus postage
from:
Istvan Nagy
P.O. Box 9637
Wellington, New Zealand
or Straw Into Gold (Pg. 562)

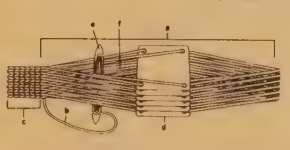
Step-By-Step Tablet Weaving

The perfect cardweaving book is in the future, but here's a very good start. Advantages for beginners: clearly explains how the shedding process works, gives two of several methods of warping and threading cards, demonstrates how threading direction affects the texture of the piece, and gives thorough weaving, joining and end finishing instructions. Drawbacks are hurriedly finished sample pieces and incomplete remedies for common problems like "Argh, my warp thread broke!" and "How do they keep the edges so straight?" The section on the complex double-turn techniques is exceptional.

—DS



Step-by-Step Tablet Weaving
Marjorie and
William Snow
1973; 80 pp
$2.50 postpaid
from:
Golden Press
P.O. Box 700
Racine, WI 53404
or Whole Earth



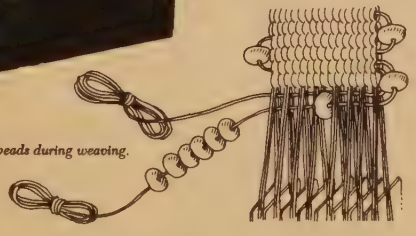
The structure of tablet-woven fabric raises the question of how the method was probably developed. It is possible to produce identical weaves without tablets, twisting two or more warp ends by hand before inserting a weft. The use of tablets with holes to twist the warp while forming a shed appears an ingenious solution to the difficulty of performing both operations by hand. The value of the twist is clear: the twisting together of warp yarns makes for a thicker, stronger fabric, and is related to the process of twisting yarns to make rope.

Cardweaving

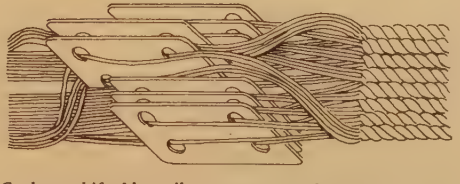
A more exciting book with a better history and list of suppliers and more tips on the weaving process itself. Occasional omissions of basics like "put your knots at the ends of the warp, never in the center" make it tough on beginners. But if you already know them, the book moves easily through a number of techniques encouraging you to explore the practically open-ended variations and sculptural possibilities in cardweaving.

—DS

Cardweaving
Candace Crockett
1973; 144pp.
$10.50 postpaid
from:
Watson-Guptil Pub.
2160 Patterson St.
Cincinnati, OH 45214
or Whole Earth



Adding beads during weaving.



Cards are shifted laterally to move warp threads, create texture, and shift color. The cards to be shifted are actually picked up and moved to a new position, then tucked back into the pack of cards.

CRAFT

SERENDIPITY

Inexpensive, off-beat favorites of textile lovers, mostly for ideas:

–DS

Cut My Cote

Small beautiful pamphlet on the development of sewn garments, Europe thru the Far East, both history and how to make them.

Cut My Cote
Dorothy K. Burnham
1973; 35pp.
$2.25 postpaid
from:
Royal Ontario Museum
Information Services
100 Queens Park
Toronto, Ontario
Canada M5S2C6
or Whole Earth

Man's shirt. English. Early 19th century. White cotton. Part of the wardrobe of Thomas Coutts (died 1822), founder of Coutts Bank. Gift of Mr. Francis Coutts.

Coptic Weaves
[City of Liverpool Museums]

Plates of Coptic medallions and fabric fragments with accompanying weaving diagrams for techniques used.

Coptic Weaves
[City of Liverpool Museums]
Margaret Seagroatt
$2.50 (approx.) plus postage
from:
G.K. Drummond (see pg. **546**)
Straw Into Gold (see pg. **546**)
Unicorn (see pg. **546**)

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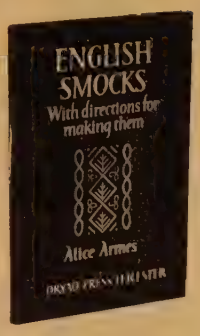
English Smocks

The patterns and embroidery designs for each, showing county-to-county variations.



English Smocks
Alice Armes
1971; 20pp.
$2.75 postpaid
from:
Craftool Co.
1 Industrial Rd.
Woodridge, NJ 07075

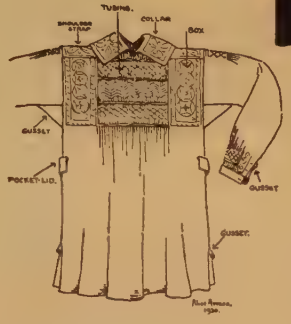


DIAGRAM 1. SMOCK WITH VARIOUS PARTS NAMED

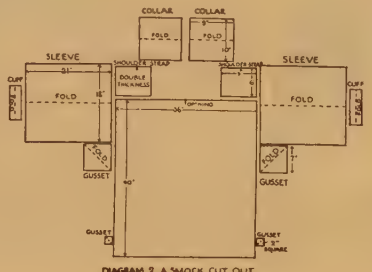


DIAGRAM 2. A SMOCK CUT OUT
The number and position of the various parts of a smock are shown but they must NOT be placed on the material in this way for cutting out.

The length required from neck to hem was taken and three times this length of material was required. It was then folded into three equal lengths, two of which formed the back and front of the smock; the third piece was again folded into three, two pieces for the sleeves and the third piece made the collar, gussets and shoulder straps.

•

The Durham Collection

Detailed history, design, embroidery patterns & analysis for sewing of Albanian and Yugoslavian garments.

The Durham Collection of Garments and Embroideries From Albania & Yugoslavia
Laura E. Start
1939; 76pp.
$1.95 (approx.) plus postage
from:
G. K. Drummond (see pg. **546**)
Straw Into Gold (see pg. **546**)

West African Cloth

Thorough scholarly work. Many photos of processes & equipment: weaving, stamping, tie-dyeing. Those of finished work are exciting idea sources.

West African Cloth
Kate Peck Kent
1971; 84 pp.
$3.00 postpaid
from:
Denver Museum
of Natural History
City Park
Denver, CO 80205
or Whole Earth

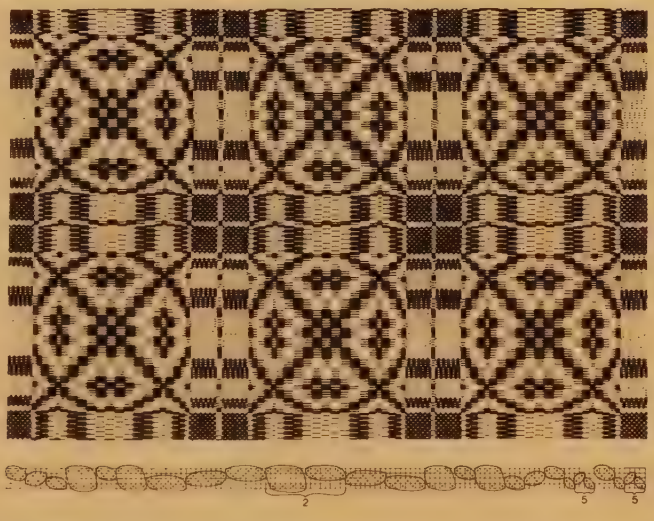
Yoruba boy winding a bobbin.

Keep Me Warm One Night

A big wonderful weaving book. The detailed study of the handweaving in Eastern Canada up to 1900 with notes on the period, equipment, materials and styles. The bulk of the book is a richly illustrated discussion of early styles and techniques. Each coverlet is described, analysed and the threading draft given: an amazing slice of textile history and a work of love. Worth saving for. . .

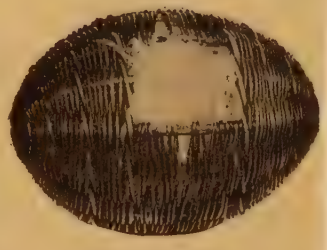
–Daphne Stewart

Keep Me Warm One Night
H. B. Burnham & D.K. Burnham
1972; 387pp.
$27.50 postpaid
from:
University of Toronto Press
33 E. Tupper St.
Buffalo, NY 14203
or Whole Earth



64/Nova Scotia. Cape Breton. 19th century ROM 970.204.1. Gift of Mrs. F.M. Mackley. Four-shaft overshot pattern draft: 'Keep Me Warm One Night'

This draft from Cape Breton is the source of the title of this book and is one of the loveliest pattern names that has been found in Canada. The design is similar to another with a wide distribution and a constant name: 'Chariot Wheels and Church Windows' (Nos. 66, 347). This draft has a larger nine-part table.



I/Ontario. Sydenham district, Frontenac County. 1825-50 ROM 968.269.1. Gift of Mrs. Edgar J. Stone. Wool basket. L. 50cm; diam. 32cm.

Made of willow withes in the shape of a rugby ball, this type of basket is well known in Scotland, and another smaller example has been seen in Cape Breton (Mackley Collection). Although sheep were sheared in Canada, a certain amount of wool was caught on the bushes of the rough pastures, which was of value particularly when the flocks were small. With a basket like this under one arm, one would wander aimlessly through the fields 'wool gathering,' picking up the small flocks of wool. This is the source of the expression that has survived to the present day. Baskets of this type were also used when teasing wool.

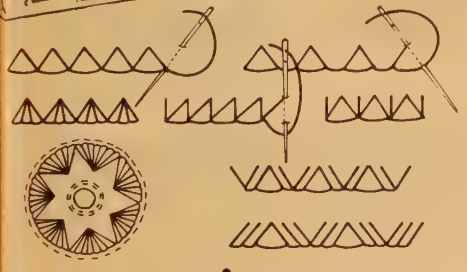
EMBROIDERY

by Diane Ritch

As an experienced needleworker, student and teacher of the craft, I am hard put to single out one book on the subject of embroidery which I could recommend to everyone. Instead, I should like to review the three books which I use the most and then list a few select books in categories, according to their use, to give those of you who are thinking about buying books an idea of what you can expect for your money.

My favorite general embroidery book and the one I use most in my teaching is Jacqueline Enthoven's **The Stitches of Creative Embroidery**. Although her approach to learning stitches is somewhat traditional, a closer look will reveal a thorough exploration of the nature of each stitch and the multitude of possibilities for its use. The stitch diagrams are excellent and the modest black and white photographs of period and modern pieces are well chosen to illustrate the use of the stitches. Enthoven does not classify stitches into arbitrary groupings according to traditional use, they are loosely allied by nature of their structure. This book is neither overwhelming for beginners nor too simplistic for advanced embroiderers and is an excellent text for anyone interested in the structure and use of stitches.

The Stitches of Creative Embroidery
Jacqueline Enthoven
1964; 212pp.
$7.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth



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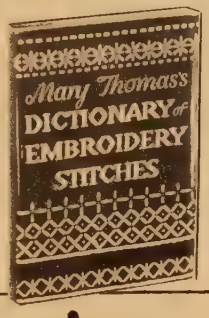
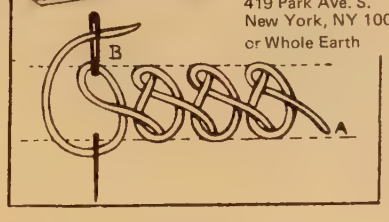
The no-nonsense, technical stitch book which I use the most is Mary Thomas' **Dictionary of Embroidery Stitches**. This may be too encyclopedic for a true novice but for anyone who has some knowledge of stitches and how they are used this is the best book available for your money. Mary Thomas has sensibly indexed the 305 stitches according to use even though they are ordered in the book alphabetically. There are only a few stitches I haven't found in this book but most of them are here, clearly diagrammed with all the variations. This is definitely not a book to inspire. . . the only photographs in the book are rather badly reproduced "drawn fabric" samplers, illustrating the most complete collection of these stitches in any single volume. (Note: The companion volume, Mary Thomas' **Embroidery Book**, has worthwhile technical descriptions of types of embroidery such as Drawn thread work, Laid work, Stump work, Jacobean, etc., but contains minimal stitch diagrams.

Dictionary of Embroidery Stitches
Mary Thomas
No date given; 234pp.
$2.00 postpaid
from:
Grammercy Div.
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth



Embroidery Book
Mary Thomas
$2.00 postpaid
from:
Grammercy Div.
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth



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The third book, the ultimate in traditional techniques, is none other than the **D.M.C. Encyclopedia of Needlework** by Th. de Dillmont. This is definitely not a book for dabblers in any kind of handwork from Embroidery to Macrame and Bobbin lacemaking. It is as highly technical as it is comprehensive and its emphasis is definitely on fine white work and lacemaking techniques (although there are a few chapters using other methods and materials). If you are experienced and interested in historical and regional variations of needlework, you will find this book contains information found in no other single volume. It is uncompromising in its detail both in photographs and stitch diagrams and is as useful to the textile historian as it is to the keen needleworker. My only complaint with the hardbound edition is the stitch descriptions are often pages ahead of the diagrams and are therefore quite difficult (if not infuriating) to read.

D. M. C. Encyclopedia of Needlework
Th. de Dillmont
1971; 804pp.
$9.50 postpaid
from:
Dollfus-Mieg & Cie.
Mulhouse, France
U.S. Distrib:
Joan Toggitt Ltd.
1170 Broadway
New York, NY 10001
or Whole Earth

•

Books that successfully combine both inspiration and technique inevitably abbreviate both to some extent but the economy of buying just one book may justify the compromise for some.

• General Embroidery •

The Stitches of Creative Embroidery Pg 571
(Beginning to advanced)

Embroidery Book
(Beginning to advanced)
Erica Wilson
$14.95 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

• Crewel Embroidery •

The Art of Crewel Embroidery
(Traditional)
Mildred Davis
$3.95 postpaid
from:
Spinnerin Yarn Co. Inc.
30 Wesley St.
South Hackensack, NJ 07606
or Whole Earth

The Craft of Crewel Embroidery
(traditional-modern)
Erica Wilson
$2.95 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

• Needlepoint •

Needlepoint
(beginning)
A Sunset Book
$1.95 postpaid
from:
Lane Magazine & Book Co.
Menlo Park, CA 94025
or Whole Earth

A New Look at Needlepoint
Rome and Devlin
$3.95 postpaid
from:
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth

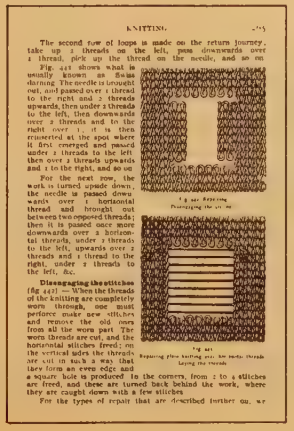
Needlepoint Pg. 173
by Hope Hanley

There are quite a few large, glossy, coffeetable books on the market that are lacking in substance. . . so beware of those!

The Complete Encyclopedia of Needlework

At last! France's needlework "bible" is in paperback! In large format, and for only $4.95! Believe the title; it has it all, carefully written, with clear precise diagramming and instructions even to needle size, thread weight, and how to modify designs. It's old-fashioned and pretty and it works.

—DS


KNITTING.

The second row of loops is made on the return journey, take up 2 threads on the left, pass downwards over 2 thread, pick up the thread on the needle, and so on.

Fig. 441 shows what is usually known as Swiss darning. The needle is brought out, and passed over 1 thread to the right and 2 threads upwards, then under 2 threads to the left, then downwards over 2 threads and to the right over 1, it is then reinserted at the spot where it first emerged and passed under 2 threads to the left then over 2 threads upwards and 1 to the right, and so on.

For the next row, the work is turned upside down, the needle is passed downwards over 1 horizontal thread and brought out between two opposed threads; then it is passed once more downwards over 2 horizontal threads, under 2 threads to the left, upwards over 2 threads and 1 thread to the right, under 2 threads to the left, &c.

Disengaging the stitches (fig 442) — When the threads of the knitting are completely worn through, one must perforce make new stitches and remove the old ones from all the worn part. The worn threads are cut, and the horizontal stitches freed; on the vertical sides the threads are cut in such a way that they form an even edge and a square hole is produced. In the corners, from 2 to 4 stitches are freed, and these are turned back behind the work, where they are caught down with a few stitches.

For the types of repair that are described further on, we

The Complete Encyclopedia of Needlework
Th. de Dillmont
1972; 787 pp.
$5.20 postpaid
from:
The Running Press
38 South 19th Street
Philadelphia, PA 19103
or Whole Earth

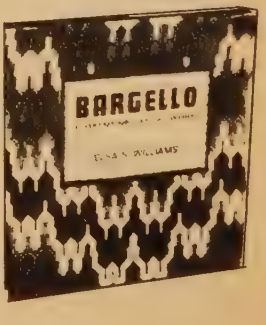
(For hardcover edition see **DMC Encyclopedia** *above.)*

Bargello

Bargello needlepoint or florentine embroidery (or any other name used to describe this type of needlepoint!) is an unusually adaptable craft. It is fast, offers an unusual opportunity to play with color and shades and can easily be used for a number of practical and/or decorative objects—— shoulder bags, cushions, vests, belts and so on.

The best basic book for this is Elsa Williams **Bargello: Florentine Canvas Work**. *All of the designs are photographed, many in color: and photographs of the designs are essential to the beginner in this type of needlework. Additionally, the Williams text is clear and interesting.*

—Carol Pollock



Bargello: Florentine Canvas Work
Elsa S. Williams
No date given; 64pp.
$6.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

CRAFT

Old Patchwork Quilts and the Women Who Made Them

This is a reprint of a book published in 1929. It is written with not only a love of patchwork and quilting but also with an obvious pride about being a woman.

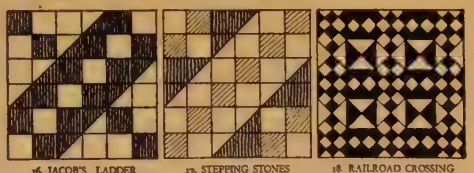
This is not a how-to-book. It is a history book because the author explains how social customs, religious and political thought of the times influenced an important folk art. "Folk Art" is probably a bad word to use because patchwork and quilting and indeed all the needle arts were the only way women could express themselves creatively for centuries. There are many beautiful black and white photographs of old quilts.

—Joan Lintault

Old Patchwork Quilts and the Women Who Made Them
Ruth E. Finley
1971
$7.95 postpaid

from:
Charles T. Branford Co.
28 Union St.
Newton, MA 02159
or Whole Earth

There is no antique more expressive of our foremothers than patchwork, which, in the main, took the form of bed-quilts. Pieced or appliqued, the quilt has been, in America, a wholly feminine creation.



26. JACOB'S LADDER 27. STEPPING STONES 28. RAILROAD CROSSING

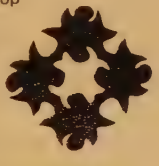
Diagram No. 16 shows the original "Jacob's Ladder" design, which is of shadowy pre-Revolutionary origin. All "Jacob's Ladder" quilts are made in two tones only, the dark patches being very dark and the light patches correspondingly light. No intermediate shades are allowable, since the fundamental idea of a "Jacob's Ladder" is extreme contrast resulting in a series of dark "ladders" running up and down the quilt or diagonally across. Now take this same block; reverse the light and dark patches and add a third intermediate tone, and you have Diagram No. 17, called in Virginia and New England "Stepping Stones", in Pennsylvania "The Tail of Benjamin's Kite", in Western Reserve "The Underground Railroad" and in the Mississippi and prairie countries "The Trail of the Covered Wagon" or just "Wagon Tracks".

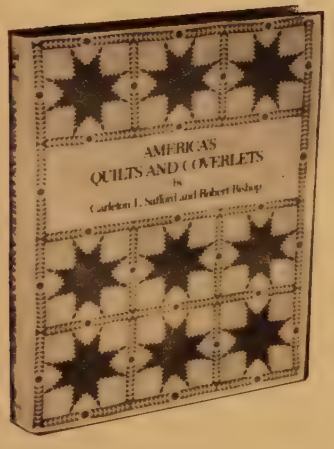
America's Quilts and Coverlets

If you are a quilt and coverlet lover and you can't get to museums that have good collections, the next best thing is to buy this book. It is a beautiful picture book, (122 color plates & 472 black & white) and fantastic for ideas. As you see the color combinations and wonderful visual effects produced in quilts one hundred and two hundred years old, predating any contemporary art movements, you begin to wonder how could something like this go on for so long completely ignored and separate from any art movements of the time. The only fault I find is that the detail photographs are often blurred and badly cropped.

—Joan Lintault

America's Quilts and Coverlets
Carleton L. Safford and Robert Bishop
1972; 313pp.
$25.00 postpaid
from:
E.P. Dutton and Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth





The Perfect Patchwork Primer

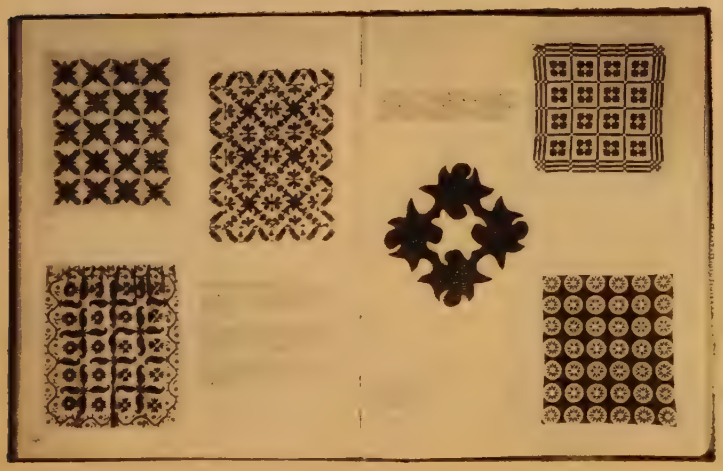
This is a no-nonsense, let's-get-to-business book about making quilts, coverlets and quilted objects. It is simple to follow because every step is clearly outlined with large type headings and with drawings and diagrams in the margins. She gives good instructions on assembling the patches and blocks and on machine sewing, and gives more than 200 different traditional patterns that can be followed.

—Joan Lintault

The Perfect Patchwork Primer
Beth Gutcheon
1973; 267pp.
$9.95 postpaid
from:
David McKay Co., Inc.
750 Third Ave.
New York, NY 10017
or Whole Earth

Masterpiece Quilt

A status symbol—a quilt made less to warm the body than to boggle the mind. They generally took a great deal of time, but the fineness and difficulty of the needlework was the criterion for a masterpiece even more than the time involved. . . . A masterpiece quilt, like grandmother's Wedgwood and the heirloom silver, was generally kept in the family, and generally in mothballs except for special occasions. The honorary function of it was so well understood that to offer an unwelcome guest a pieced quilt instead of the best applique was a hint only slightly more subtle than locking the door behind him when he left to take a walk.



Cream Rises
QUILTING & PATCHWORK

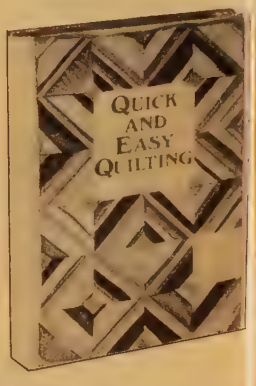
Quilting *Scholarly* 573
Old Patchwork Quilts and the Women Who Made Them *Woman power* 572
America's Quilts and Coverlets *1001 Ideas* 572
Perfect Patchwork Primer *Best beginners* 572
Quilter's Newsletter *Needlers unite* 573
Quilts & Coverlets *New ideas* 568

Quick and Easy Quilting

Good instructions for no-frame quilting quilts that are pieced and quilted-as-you-go. It is a good book for people who like taking some creative work with them. It has the most complete directions for making string quilts I've ever seen plus a chapter on making money on quilting.

—Joan Lintault

Quick and Easy Quilting
Bonnie Leman
1972; 191pp.
$6.95 postpaid
from:
Hearthside Press, Inc.
445 Northern Blvd.
Great Neck, NY 11021
or Whole Earth



Step One. Each block in this quilt will be 11-1/2" square, finished size. Cut a 12" square of newspaper. Cut it in half diagonally both ways to make four equal triangles. Each of these triangles will be a pattern piece. You will need four for each block in your quilt. (A quilt about 58" x 80" would take 35 blocks for a total of 140 triangles.) You will also need four of Pattern A for each block. Cut these from light colored cloth instead of newspaper.

Fig. 27

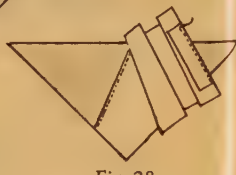


Fig. 28

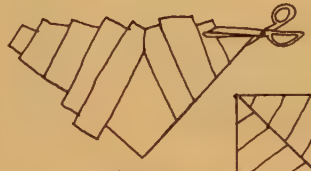


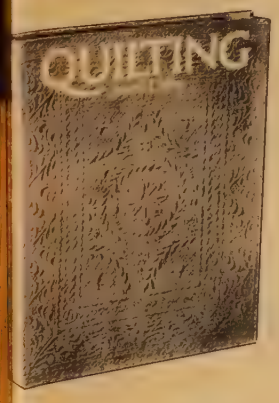
Fig. 29

Fig. 30

Quilting

So far this is the only book devoted solely to quilting. It is a scholarly work dealing a lot with its history dating back to the Egyptian first Dynasty) and development. There are many photographs of elaborate quilts and quilted garments. The photographs are mind-blowing, because if you've ever quilted you can appreciate the intricate textures and configurations that are in the illustrated examples. There are many drawings of patterns, and diagrams of stitches, tools and techniques.

—Joan Lintault



Quilting
Averil Colby
1971; 212pp.
$12.50 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

III *Man's cord-quilted linen cap, lined with cotton. The crown is in four sections with an additional piece for the brim. English, early eighteenth century*

Quilter's Newsletter

A subscription puts you in touch with other people who are quilt freaks. They have classified ads that tell you where to get scraps of material by the pound, where to get your quilt machine-quilted, a pattern exchange column and quilt stories. The magazine sells thread and needles for people who can't find good cotton thread anymore. They also sell patterns and plastic templates, and will tell you where the current quilt exhibits are and who is teaching quilting classes.

—Joan Lintault

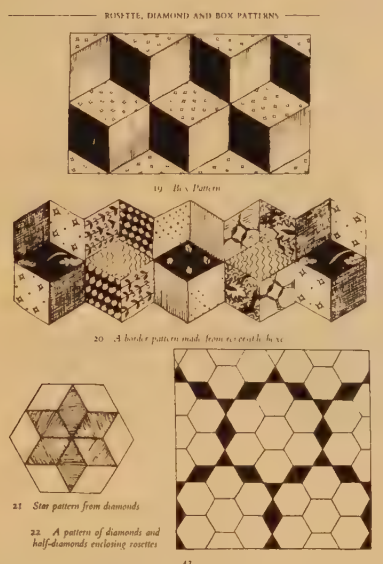
Quilter's Newsletter
$5.25/year
60¢ / sample issue
(Includes catalog
& free patterns)
from:
Leman
Publications, Inc.
Box 394
Wheatridge, CO 80033

Patchwork

As with her companion book on quilting, Averil Colby's book on patchwork deals both with the technical and historical. There is a valuable appendix to the book with instructions on making templates, sewing patches, making log cabin and shell patchwork.

—Joan Lintault

Patchwork
Averil Colby
1958; 201pp.
$11.50 postpaid
from:
Charles T. Branford Co.
28 Union St.
Newton, MA 02159
or Whole Earth



19 Box Pattern

20 A border pattern made from six-pointed boxes

21 Star pattern from diamonds

22 A pattern of diamonds and half-diamonds enclosing rosettes

43

Freebie

Heirloom Plastics offers a free catalog and quilt-as-you-go instructions with each $2.50 (6-months) introductory subscription to the **Quilter's Newsletter**. *Joan says it's a good deal. Write Heirloom Plastics, Dept. MC9, Box 501, Wheatridge, Colo. 80033 for the package.*

—DS

CRAFT

QUILTING SUPPLIES

by Joan Lintault

Quilt frames and hoops

Dick Blick
P.O. Box 1267
Galesburg, IL 61401

Needleart Guild
2729 Oakwood N.E.
Grand Rapids, MI 49505

Gibbs Manufacturing Co.
Canton, OH

Sears Roebuck Winter Catalogs

Lee Wards
Elgin, IL 60120

Batting

The Stearns and Foster Co.
Cincinnati, OH 45215

The manufacturer of Mountain Mist quilt batting has available for free two books: **Designs for Quilting** and **Quilt Making on the Sewing Machine.** They also sell patterns and Dacron polyester or cotton quilt batting by mail. If you need the services of a hand quilter they will supply you with the name of someone in your locality. If you send for Catalog No. 41 they will send you a complete pattern list plus prices.

Aunt Martha's Studios

These little booklets have been around forever as far as I can remember. Each booklet has from 12 to 17 different full size patterns printed so you can cut them out if you don't mind cutting the booklet up. There is complete yardage and color information, also what patches should be prints and which should be plain. Their price is their main asset.

Quilt books, about 75¢ ea., 15 pp. From department or variety stores, or from Aunt Martha's Studios, Dept. 970, 1245 Swift, Kansas City, MO 64116. Single quilt patterns 50¢ each.

Mrs. Danner's Quilts

Scioto Imhoff Danner was a woman who started a business in the 1930's on quilt pattern design. At one time she employed 25 women piecing, appliqueing and quilting the designs that she used for her displays. Her booklets are still available although another person has taken over her business. The booklets are very homey with a lot of Mrs. Danner's personality coming through. They are written by a person of another time.

Basic Quiltmaking, $1.00.

Catalogs Available:
No. 1 & 2 combined $1.25
No. 3 & 4 combined $1.25
No. 5, $1.00

Mrs. Danner's Quilts
Box 650
Emporia, KS 66801

Donna Renshaw

Ms. Renshaw has prepared two nice leaflets. For $1.60 apiece you can receive **How to Conduct Quilting Classes** and **How to Hold a Quilt Show**. They are both really nice, especially **How to Conduct Quilting Classes**. She tells you everything you need to know, how to word your publicity, collect money, organize your teaching space. She even gives you a lesson plan for an eight-week course.

Donna Renshaw
541 Gabilan St.
Los Altos, CA 94022

Co-ops and groups that sell their quilts

Not by all means a complete list but you will get lots of letters suggesting others.

Southern Illinois Quilters Association
c/o Bonnie Krause
Route 1, Box 76
Alto Pass, IL 62905

Mt. Creek Baptist Church
Asheville, NC

A dozen or more women meet twice a week for quilting parties do quilts to order.

Monday Quilting Bee
Ladies of St. Vincent Orphanage
Louisville, KY

Quilt to raise money for the orphanage.

Mountain Artisans
Gazebo
14 E. 57th
New York, NY

Location of their showroom in New York. Help women of the West Virginia towns of Big Ugly, Little Ugly and Sod— 125 women employed making beautiful patchwork and quilted articles. Many of these women never have been able to work before. They finally have found an outlet for a skill none thought monetarily valuable before.

Mennonite Relief Committee
Goshen, Indiana

Large quilt auction held annually in September.

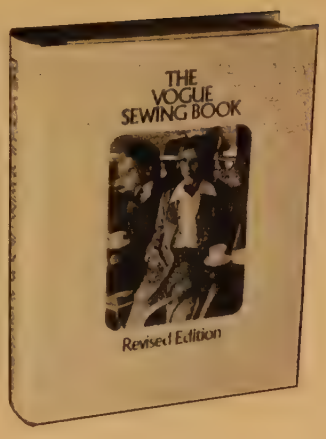
CRAFT

The Vogue Sewing Book

In spite of the high-fashion exterior and lay-out, this revised edition serves as an excellent over-all machine sewing source book. It provides thorough and easily understood descriptions of most every sewing technique and problem that you may encounter when using a commercial pattern for sewing modern fashions. Includes descriptions of modern fabrics, actual tailoring for men and women and hundreds of definitions and drawings of basic steps of how to make pieces of cloth turn out to be something you can enjoy wearing. Sections on sleeves, collars, facings, trims, pleats, ruffles. Good general reference book.

—Judy Sears

The Vogue Sewing Book
(Revised edition)
Vogue Patterns
1973; 464 pp.
$15.95 postpaid
from:
Vogue Sewing Book
P.O. Box 950
Altoona, PA 16603
or Whole Earth

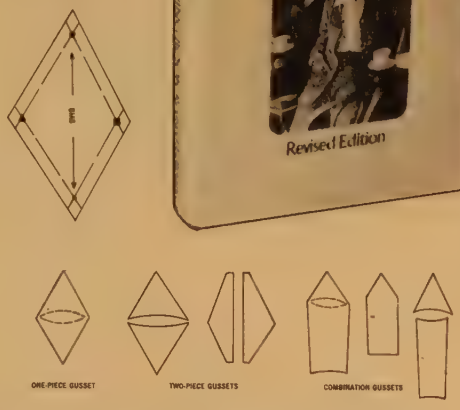


Gussets

Just the mere mention of the word "gussets" can cause panic if you aren't accustomed to sewing them. But don't despair—— you can attain foolproof results with even the trickiest of gussets by using appropriate reinforcement and *very careful* stitching.

A gusset is a triangular or diamond-shaped piece of fabric set into a garment at a slash. Most commonly it will be found at the underarm curve of a kimono sleeve, set in a slash which cuts across the garment from front to back. It makes possible a longer, slimmer kimono sleeve with an armhole closer to the body—— in general, a more sophisticated fit than the kimono sleeve without a gusset. Another by-product of the gusset is added comfort through increased flexibility of the sleeve. Because the area under the arm receives a maximum amount of strain and needs ease for movement, the gusset should always be cut on the bias.

The gusset can be of one or two-piece construction—— with a dart at the underarm or a seam joining the two

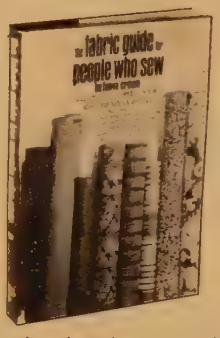


sections. Frequently the gusset is combined with a portion of the garment, such as the underarm section of the sleeve or a side panel of the bodice, and it is then known as a combination gusset.

Fabric Guide for People Who Sew

Essential information for someone who has been faced with and frustrated by the tide of synthetic and synthetic-natural fabrics available on the market and the tremendous lack of information as to its character. Excellent source book: also lists major wholesalers, and government regulations for labeling fabrics. See if you can find it in your local library—— it's sort of expensive.

—Judy Sears



The Fabric Guide for People Who Sew
Fenya Crown
1973; 152pp.
$6.95 postpaid
from:
Grosset & Dunlap, Inc.
51 Madison Ave.
New York, NY 10010
or Whole Earth

Every fiber has its virtues and its faults, and they both derive from the nature of the fiber. Nylons, polyesters and acrylics wash easily without much wrinkling and dry rapidly because they do not readily absorb moisture. But the same trait can make a tightly woven synthetic hot and uncomfortable in summer because it doesn't absorb perspiration. Cotton and rayon are highly moisture-absorbent and thus comfortable to wear, but their dimensional stability—— ability to retain shape and size when cleaned or worn—— is only fair to poor unless they are specially treated. Man-made fibers are "thermoplastic"—— they can be set into permanent pleats by heat and chemical treatment—— but too hot a dryer may, in reverse, take the pleats out. Silk and wool take the most brilliant of colors, but they usually can't be washed.

Tailoring Suits the Professional Way

This is the finest book I've read on tailoring in 13 years of self-taught sewing. Most books I've read deal only with women's clothes constructed in the air of rapidly changing fashion and intense commercial manufacturing, so a great deal of attention is not given to fit or technique—— just the quickest easiest way of getting it together. This book deals concisely, yet simply with the steps of tailoring men's and women's coats, pants, vests and skirts. It also provides formulas for drafting patterns of each and is a bountiful source of "tricks" of the tailoring trade, like how to get rid of a scorch. If you're really interested in tailoring as a craft, you can read this book like a novel.

—Judy Sears

FIG. 36.

FIG. 37.

Tailoring Suits the Professional Way
Clarence Poulin
1973; 213pp.
$8.00 postpaid
from:
Charles A. Bennett Co., Inc.
809 W. Detweller Dr.
Peoria, IL 61614
or Whole Earth

(1) Balance and Hang of Fronts

If the coat is properly drafted and the balance right, its fronts will hang side by side almost perpendicularly when it is tried on. It is to be expected that the space between them will be a trifle wider at the waist than at the chest, because of the unfinished condition of the edges; but the fronts will neither gape wide open at the bottom nor criss-cross there. If they show a tendency to do either, the balance of the garment is faulty

•

Fig. 36. The extent of the defect determined by pinning out a fold across the front shoulder. This lifts up the fronts to their normal position by shortening them from the top. Fig. 37. One method of altering for the defect. Lower the shoulder seam from A-B to C-D, removing the shaded portion. To the same extent lower the top of the revers, as from E-F to G-H; and deepen the armhole from I to J.

Cream Rises
SEWING

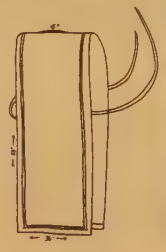
Encyclopedia of Needlework *Favorite hand-work sewing* 571
Vogue Sewing Book *All round machine & pattern* 574
Illustrated, Hassle-free, Make Your Own Clothes Book *Make anything into something else* 172
If You Can't Go Naked *Wrap, tie, pin* 574
Native Funk & Flash *Traffic stopper* 568

If You Can't Go Naked

A simple, delightful book. The author suggests you look at the pictures, get a 'flash' from a garmen and if you like it, proceed to wrap, fold, tie, pin or occasionally sew the garment. Many ideas from oth cultures who never lost the idea of comfort being o primary importance when it's necessary to cover pa of your body. Go naked when you can, the sun lo you, but "If you Can't go Naked. . ." this is an encouraging book to get you wandering over the nooks and bumps of your body so that you might discover your own ways and places to hang cloth about you.

—Judy Sears

If You Can't Go Naked Here are Clothes to Sew On Fast
Donna Lawson
1973; 148pp.
$3.95 postpaid
from:
Grosset & Dunlap, Inc.
51 Madison Ave.
New York, NY 10010
or Whole Earth



The Fly-by-Night Dress

Like the chiripa, 36" fabric with selvages for finished edges works out nicely for this dress. Here, too, the ties "form" the dress.

1. Use one piece of fabric 36" x 106". Fold fabric in half widthwise. Cut a 15" slash widthwise directly in middle of fold for neckline. Hemstitch neckline. Hemstitch fabric at bottom edge. Slip garment over head. Locate spots where waistline falls on either side of garmen At those spots attach ribbons long enough to tie around body and sash in back.

2. Tie ribbons underneath back flap for cape effect.

3. Or, tie ribbons over back flap catching it underneath.

Tie-On Dress Two

1. Use same type fabric as used for Dress One: 45" wide, 60"-70" in length. Again selvages serve as hemline and edging around neck and backline. Center fabric at back. Bring it under arms.

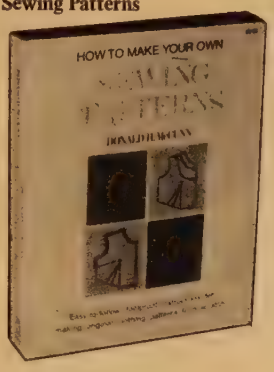
2. Cross it over in front. Pull ends of fabric up. Tie ends together behind neck. Smooth drape of fabric in front so it hangs evenly. Every body is a little different so it may take a few adjustments in tying and draping fabric until it looks just right for you.

How to Make Your Own Sewing Patterns

The most readable pattern drafting book I've found. The drawings are the simplest line drawings possible but executed with concise purpose. Aimed at someone who's already familiar with basic sewing skills. Interesting notes on making stage costumes.

—Judy Sears

How to Make Your Own Sewing Patterns
Donald H. McCunn
1973; 301pp.
$5.95 postpaid
from:
Hart Publishing Co., Inc.
719 Broadway
New York, NY 10003
or Whole Earth



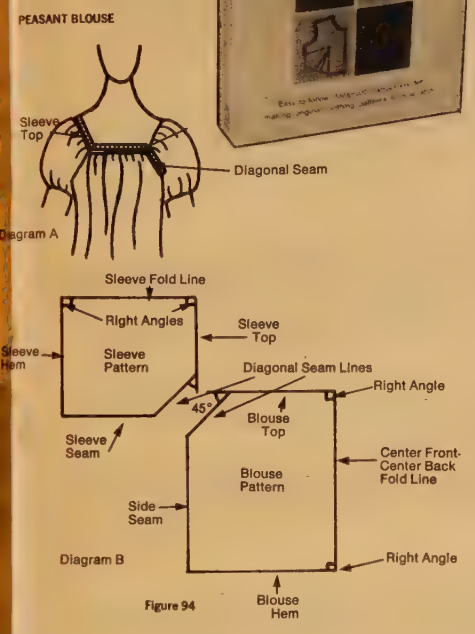


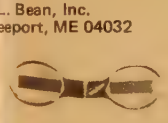
Figure 94

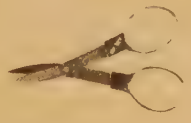
Minisnips

Carry them in a pocket, in a purse. Easy on the fingers. Sharp little rascals. Indispensable. (Made at Camco Industries, of surgical steel with chromed handles.)

—DS

$3.00 postpaid
from:
L.L. Bean, Inc.
Freeport, ME 04032





Fiskars

I've seen scissors like mine around in stores locally that are self sharpening. They grind a little as they cut—— right through three layers of fabric at a time. Red handles for lefties; orange for righties. Thought you'd like to know about them.

Retail $9.50.

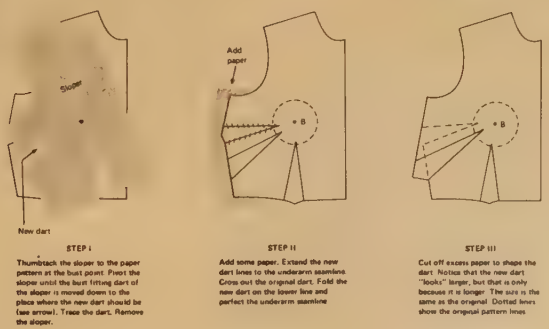
—Dana Hawley
Fairfax, CA

Pattern Making by the Flat Pattern Method

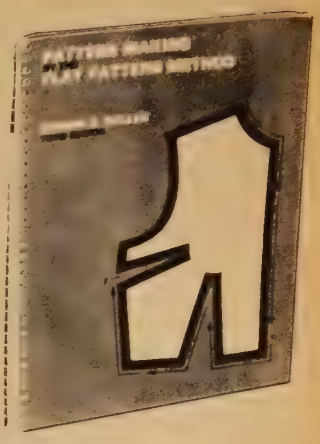
FLAT-PATTERN work starts with a commercial basic pattern that has previously been altered to fit the individual. The pattern work consists of changing this altered basic pattern to make a pattern for a chosen design. The work is done in paper on a flat surface.

Excellent instructions and technique.

—Judy Sears



Pattern Making by the Flat Pattern Method
Norma R. Hollen
1972; 207pp.
$5.75 postpaid
from:
Burgess Publishing Co.
7108 Ohms Lane
Minneapolis, MI 55435
or Whole Earth



8

WELCOME TO CAMP CRAP

They're all over the place. Gurus. Each one wears a sweatshirt that says CRAP on the front, in order to distinguish them from amateurs, disciples, skeptics, tourists, reporters and concessionaires.

The paths to consciousness are paved with stalls, tents, booths, domes, teepees, trailers and huts.

Chocolate Graham is touching the thigh of a swami with a purple turban.

"No," he says, "you must not do that. We should abstain from such pleasures of the flesh since it is all an illusion anyway so why bother ourselves, you see?"

"Testing. One, two, three. Testing." This voice is coming from a speaker system beside a gigantic television screen set up in the middle of a field. In the woods there is an outhouse with a sign nailed to the door that reads *TV Ching*.

An audience of a few hundred watches an image begin to form on the screen. It's a naked man standing next to a two-seater toilet.

"Are we on? Lovely. Good afternoon. I represent the Asshole Liberation Front. Our premise is that any level of illumination must be able to withstand the temporal indignity of defecation or it isn't worth being communicated. In my own case, of course, they're inseparable."

He stands on the toilet seat, then squats. As he squeezes out a turd, his face grimaces with delight.

"Sometimes I think my bowels move me more than I move them. I tell you, friends, this is basic. There's a one-way mirror in here, with a television camera behind it, but my demonstration should be on all the networks. Oh, I realize it might seem trivial, but the importance of squatting cannot be exaggerated."

A pair of federal agents is busy taking notes. One, Primo Columbian of the FBI, is wearing a new pre-soiled trench coat. The other, Notary Sojak of the CIA, is wearing a completely shaved head....

Flashiebackie:

The Chief Coordinator is giving instructions to Columbian and Sojak.

"What we want to do is link up the Camp Crap people with the Better Your Exit group. Now, our surveillance indicates that there's a half-Japanese fellow at the camp whose father was a Kamikaze pilot in World War Two. With a tie-in like that, he would be a particularly relevant target of your investigation."

Columbian: "Lemme ask ya somethin', chief. How we gonna prove these people are subversive if they're operating right out in the open?"

Sojak: "I'll answer that. They're shrewd. They don't wanna look suspicious. That's the most suspicious thing about them."

Columbian: "Well, I been readin' a book of Haiku poetry so I can start a casual conversation with the Japanese guy. They all have to be seventeen syllables."

Sojak: "I don't know about your style, Columbian. I prefer the straightforward approach. I'm not dumb, and I'm not gonna pretend to be dumb."

Columbian: "It's just a way of learnin' stuff, Sojak. I even started writin' one of them little poems. Listen to this. I call it 'Haiku with Five Syllables Missing.' "

He takes a scrap of paper from his pocket and reads aloud:

We stayed up all night
Discussing the sense
Of touch....

Rosebud Zwalyimeh is touching the same thigh of that same swami with the purple turban.

"Yes," he says, "you must do that. We should not abstain from such pleasures of the flesh since it is all an illusion anyway so why not indulge ourselves, you see?"

"But then why did you reject my friend Chocolate?"

"She is not nearly so beautiful as you."

"Why, you're nothing but a Superficial Chauvinist." She withdraws her hand. "Don't you think there's a passion inside her little body too?"

The swami puts his hand on her thigh. She removes it.

"Does this mean," he asks, "that you have come here only to test my consistency?"

"That's right, swami. It's a technique we've used successfully in the civil rights movement. A black person would try to rent a home and be told it wasn't available. Then a white person would try, and if it turned out to be available, legal action could be taken."

"I've done nothing illegal, my dear. I merely find you extremely attractive."

"Well, you can just take your turban and shove it up your purple illusion."

/Continued, page 581/

Community

Diana Barich (DB), who's been part of Whole Earth since it was a mad gleam in the eye, did the evaluation and editing for the Community Section. All the inevitables—— birth, death, politics and cooking—— seem to gather here. "Community" apparently means "home".

—SB

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YELLOW PAGES

Alternative access directories are popping up like weeds and mushrooms. I'd use one if I were new in town, thinking of moving, bored, or lonely. They all cover a wide range of local services & sources. Here are some of them—— there are more listed in **Crisis Information Centers** *and* **Resources. Getting Together a People's Yellow Pages** *tells you how to make one for your community.*

—DB

Getting Together a People's Yellow Pages
(An Overground Underground Toward Social Change)
$.50 postpaid
from:
Vocations for Social Change
353 Broadway
Cambridge, MA 02139
or Whole Earth

The San Francisco and Bay Area Peoples' Yellow Pages
1972; 131pp.
$1.75 postpaid
from:
People's Yellow Pages Collective
Box 31291
San Francisco, CA 94131
or Whole Earth

People's Yellow Pages
(Boston Area)
1973; 174pp.
$1.45 postpaid
from:
Vocations for Social Change
353 Broadway
Cambridge, MA 02139
or Whole Earth

Chinook Centrex Portland Access Directory
Ken Smith & Steve Johnson
1973; 456pp.
$1.40 postpaid
from:
Chinook Centrex
4312 S.E. Stark St.
Portland, OR 97215
or Whole Earth

Gay Yellow Pages, The Quarterly Directory
Ed. Frances Green
$ 5/ea.
$10/yr. (4 issues)
from:
Renaissance House
Box 292 Village Sta.
New York, NY 10014
or Whole Earth

National Directory of Hotlines and Youth Crisis Centers

By area—— where to go, who to call when you're in trouble.

—DB
[Suggested by Richard Green]

National Directory of Hotlines and Youth Crisis Centers
$3.00 postpaid
from:
The National Exchange
51 37th Ave. N.E.
Minneapolis, MN 55421

PRIMARY EMPHASIS OF PROGRAM

CODE		
	SECTION A	TELEPHONE SERVICES
A-1	Hotlines	Usually youth oriented service, staffed primarily by volunteers, offers "listening", some referral, often open only in evening.
A-2	Switchboard	Telephone and/or walk-in service, staffed by trained volunteers or run by commune or collective. Some offer crash housing.
A-3	Crisis Center	Serve all ages, variety of help available. Staff may be professional, para-professional or both. Usually 24h/day
A-4	CONTACT Teleministry	Programs religiously sponsored. Must meet basic standards, smash as training, 24 hour per day service.
A-5	Info & Referral	I & R Centers usually sponsored by United Fund or United Way. Mostly day time hours, staffed by professionals. 100's of resources.
A-6	Suicide Prevention	Centers interested primarily with life threatening behavior. Some have broader purpose.
A-7	Specialized	Programs limited to one type of problem (Drug, sex, VD, etc.)
A-8	Other	Telephone program which doesn't fit above definitions.
	SECTION B	FREE CLINICS
B-1	Free Clinic	Offer direct medical, counseling, drug, and/or legal help. Hours vary. Staff- professionals, trained volunteers.
B-2	Counseling Clinic	Similar to free clinic, but only for counseling.
	SECTION C	RUNAWAY PROGRAM
C-1	Runaway House	Usually short term residence for those under 18 years of age. Staff varies. Offer individual and/or family counseling. Also referrals to other help. Usually 24 hours per day.
	SECTION D	RELATED SERVICES
D-1	Drug Program	May offer crisis counseling, residential treatment, etc.
D-2	Drop-In Center	Recreation, limited counseling, other activities.
D-3	Other	Various types of programs providing access to help. Not one of above categories.

PORTLAND
Suicide & Personal Crisis Service — A-3,6
PO Box 4443 — 97208
(503) 224-1875 — 24h 7d

Women's Health Clinic — B-1
3537 SE Hawthorn Blvd. — 97214
(503) 234-9774

SALEM
"Cry of Love" — B-1
Salem Cultural Center
1190 12th SE — 97301
(503) 362-9482

Switchboard for Help — A-2
358 Superior SE — 97302
(503) 581-5535

NOTE: Although many programs share the same name, the services they provide vary from program to program, and from city to city.

PENNSYLVANIA

ABINGTON
Tel-A-Help — A-1
Abington Hospital — 19001
1200 Old York Rd.
(215) 884-2220 — 24h

ALLENTOWN
Bethlehem Drug Line — A-7
N.A.A. — 18101
(215) 439-8585 — 24h 7d

[illegible]
The Soul Shack — B-1
221 Ardmore Ave. — 19003
(215) 896-7256

BETHEL PARK
Teen Hotline — A-1
5153 Brightwood Rd. — 1[illegible]
([illegible])

BLOOMSBURG
Listening Ear — A-1
Box 326 Bloomsburg St. College — 17[illegible]
(717) 286-7800 — 24h 7d

BROOKHALL
[illegible] — A-1
[illegible] Highland Ave. — 1900[illegible]
([illegible])

CARLISLE
Youth Service Center — B-2
11 S. Pitt St. — 17013
(717) 243-8700 — 24h 7d

Resources

Mimeo hodge-podge. Lists "alternative" things, publications, projects far too miscellaneous to describe. Fun to read.

—DB

Resources
Ed. Richard Gardner
$5/yr. (monthly, plus index)
$7/yr. outside U.S. & Canada
from:
Resources
Box 490
Somerville, MA 02144

COMMUNITY NUTRITION INSTITUTE, 2029 K Street NW, Washington DC 20006, 833-1730, was started to combat hunger and malnutrition among the poor. They develop service programs and provide information on food and nutrition and publish a newsletter.

•

WOMEN'S LAW FUND, Keith Building, Cleveland OH 44101, (216) 621-3443, is an organization that handles "precedent setting legal issues in the area of sex discrimination." For example, they recently filed a suit on behalf of a 12-year-old girl who wants to take industrial arts in school. The course now is limited to boys. This is believed to be the first Federal suit charging sex discrimination in a public school system.

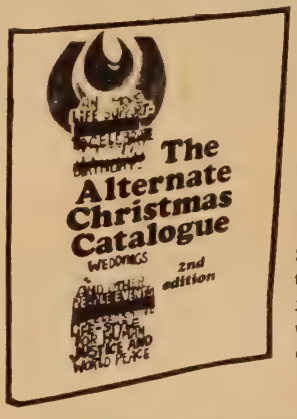
•

THE WORKING MOTHER, Maternal Information Services, Inc. 46 West 96th Street, New York NY 10025, is a newspaper providing help to mothers who work. For example, how to find day care services, set up your own day care, laws that affect working, single, divorced mothers.

The Alternate Christmas Catalog

Half ideas for new ways to celebrate old holidays, half a directory of worthy causes you might want to contribute to instead of the usual gift-giving. Moral question: Should you give this book to a friend at Christmas?

—DB



The Alternate Christmas Catalog
(2nd Edition)
1974; 128pp.
$2.50 postpaid
from:
Alternatives
1500 Farragut St. N.W.
Washington, DC 20011
or Whole Earth

For gift-making ideas for and by children, write to:

Women for a Peaceful Christmas
Box 5095
Madison, Wisconsin 53705

ask for a booklet called:

"No More Shopping Days Til Peace"
20 cents plus postage

•

Association for Childhood Education International
3615 Wisconsin Avenue
Washington, D.C. 20016

ask for a booklet called:

"Bits and Pieces"
$1.25 plus postage

•

Sturdy, easy-to-make stilts would provide endless hours of fun. Wooden blocks would be simple to make; a lot of home-made game boards would last longer and have more personal appeal than those made with plastic playing-pieces. There are many patterns available for simple doll clothes. They could be made with scraps of material used to make clothes for the child. A more industrious project would be to make a tree house. Instructions are available at the library and in some magazines. There is no need to mention here how much a tree house would delight a child.

Crisis Information Centers: A Resource Guide

Handy listing of directories, periodicals, organizations, and legislation having to do with crisis centers. Good research tool; covers information on hotlines, free clinics, mental health, suicide, and the like, but very little direct access. What to read, not where to go.

—DB

Crisis Information Centers: A Resource Guide
Carolyn Forsman
1973; 21pp.
$2.00 postpaid
from:
The National Exchange
51 37th Ave. N.E.
Minneapolis, MN 55421

Hey Beatnik!

The Tennessee sequel to **Monday Night Class** *(Pg. 407). This is a completely ingratiating book and where else can you find between two covers details on delivering a baby (even twins), building an outhouse, getting along with the neighbors and getting along with yourself? The pictures are great—— full of happy, healthy people and their kids living midst plenty and peace in Tennessee. They admit cheerfully to mistakes (one year they spent over two months harvesting an enormous sorghum crop; the next year they whittled their operations for quality rather than quantity), but they've also learned a lot and emphasize the respect they have for all who've taught them: their neighbors, the water department, the sheriff, etc. A really handy book if you're thinking of communal farming.*

—Heidi Seney
[Suggested by Matthew McClure]

Hey Beatnik!
(This is the Farm Book)
Stephen and the Farm
1974; 104pp.
$1.95 postpaid

from:
The Book Publishing Co.
The Farm,
Summertown, TN 38483
or Whole Earth

Before we got down to Lewis County we thought we was the space-agest modernest thing there was. And when we got there, there were the Mennonites and the Amish all the way from Lancaster County to Tennessee, who got there first and broke ground for us—— for long hair and spiritual groups and things like that. So there's a lot of stuff people accepted about us from the beginning. Once they learned that we really weren't scary and we really weren't violent and we really were truthful, they started thinking we were Technicolor Amish.

HEY LADIES! Don't have an abortion, come to the Farm and we'll deliver your baby and take care of it, and if you ever decide you want it back, you can have it.

•

This is the most spoiled generation in the history of the planet. That's because of that entire psychological trip of the last twenty or thirty years that says, "Oh, poor baby, you're so determined, you can't help it." And he says, "Yeah, yeah, spoil me some more!" This whole society is in a condition of overcorrection, like a car that's fishtailing on ice. Our grandparents were strict with our parents, and our parents were loose with us, and we're the sloppy beatniks. And we got to raise our kids halfway in between where our grandparents raised our parents and where we were raised. What it looks like to me is that Freudian psychology and Doctor Spock and greed and B.F. Skinner and a few details like that taught this country that morality didn't count and that all that counted is what you got caught for, and that there was no abstract absolute morality, so it didn't matter what you did—— you could just do anything. And you could freak out as much as you wanted to, and it didn't matter. But it does matter. It can get you crazy. One of the things we notice when we're traveling around the country is that American folks keep their kids like adolescents where in another society they'd be grownups. There's people their age in other cultures who are making it on their own and supporting other folks too, whereas adolescence in this country continues on to about thirty.

•

Contrary to the opinions of many other beatniks and health food stores, we eat white sugar. If eaten wisely, sugar is a clean-burning fuel that causes no harm. There's an emotional rumor out that says sugar "destroys" B vitamins. Thiamin (a B vitamin) acts as a catalyst in the metabolism of carbohydrates (sugar and starch). That's its gig. If you eat wheat germ, brown rice, nutritional yeast, and enriched or whole wheat flours, you'll have plenty of thiamin to metabolize your sugar.

•

I'd wake up with just the edge of a cold coming on, and feeling a little rocky, and take the care and the time to make love properly, and feel really grateful to have a lady who works with me in that way and who really heals me. You can be into a cold enough to have it start making your soft palate swell and stuff like that, and just know it and stop it by raising your energy level that way.

•

Journal of the New Harbinger

Cooperatives are one very viable tool for dealing with our current economy, or lack of same. The **Journal** *is jammed with solid reports and research on food co-ops, consumer ownership, credit unions, and many other resource-pooling alternatives. Each issue is focused on one area, send for their back-list.*

—DB

Journal of the New Harbinger
(A Journal of the Cooperative Movement)
D.R.M. Friedrichs, Ed.
$6 /yr bi-monthly
from:
Co-op Periodicals
Box 1301
Ann Arbor, MI 48106

Living in the Ozarks Newsletter

Spalled off from the now-deceased **Ozark Access Catalog**, *this is a nice occasional compendium of tips for living in a little-known region just west of the Mississippi.*

—SB

Living in the Ozarks Newsletter
Joel Davidson, Ed.
$5.00 /yr

from:
Upper Friley Organization School
Pettigrew, AR 72752

Looking for Land tip No. 2

There's plenty of poor land in the Ozarks. Wild land is c rocky and scarey to new comers. But old farms are ofte just as bad or worse. You can usually identify an old pl out field by finding winged elm and eastern red cedar o Sure, it looks pretty and all, but it is a hard job to re-bui what soil is left. The same goes for some piney areas. P can grow on most any soil. Big white oak and hickory a indicators of good soil in wooded areas. Think twice ab old fields.

Community Publications Cooperative

The Twin Oaks Community seems one of the solidest, mo working communities in the country. Some of their services:

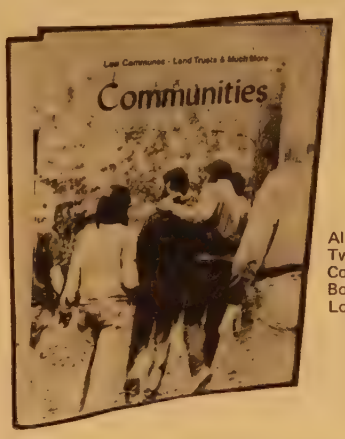
Communities *($6/yr bimonthly) magazine; each issue devo to a different theme: social change, schools & community directory of communes. Very professional, good reading. It is the result of the joining of forces of* **Alternatives** *(formerly* **The Modern Utopian***),* **Communitarian, Commu** *and* **Community Market.**

Openings *(50¢) lists communes which are inviting new members, each self-described, pictures of some.*

Leaves of Twin Oaks *($3 for six issues) is their informal exchange of ideas and experiences with other communitie*

Twin Oaks Property Code, By Laws and Working Governn *(50¢) just goes to show that good will is rarely enough. A excellent model, they seem to have thought of everything.*

—DB



All from:
Twin Oaks
Community
Box 426
Louisa, VA 230

Planner decision regarding members owning property

January 28, 1972

Individuals with savings or property have two choices:

1. They can donate 10% of their property to the Community after two years of membership and 10% every year thereafter until after 11 years of membership when a member will no longer own property.
2. If a member does not want to start donating mone to the Community at the end of two years membership, that member may wait and donate all of co's property to the Community at the end of seven years of membership.

•

Too many people are eager to get into community witho really knowing the difficulties that are there, and this lea to unrealistic expectation and premature disappointment

Our first big problem in this community was ego conflict between the men. Two of these men eventually left. The wife of one said to us: "He still wants to be in a commun but he wants to run it!" Community is no place for some who wants to run it, unless it's a religious group like the Brotherhood of the Spirit or the Farm. People can run th individual areas: the kitchen, the garden—— but not the whole show.

•

Our next big problem was sexual jealousy, which for a w dwarfed all other problems. This problem is far from sol but except for occasional big freakouts, it seems less tha before. Maybe we are just getting used to it. This is espec hard for couples who have been together for some time t joining the community (most of us had been married 6 t years). Just being in community forced a drastic rearran of that relationship. Old patterns and dependencies are b up: the husband is no longer necessarily the breadwinner wife the homemaker; there are other close companions; couple has to make fewer common decisions; child rearin no longer solely the parents' responsibility.

Auroville

On the 28th of February, 1968, Auroville emerged on the southern coast of India, a global laboratory for the conscious evolution of a city. No blueprints, no formula. Auroville began its process, confronting simultaneously the roots of a system in transition: socio-environmental, educational, economic. . . with the understanding that a system can be transformed only when the consciousness inhabiting that system is transformed. The setting, rural India, the composition, presently some 350 scattered in twelve sub-communities encompassing six continents, and more than 18 nationalities, nearly half of whom are Asian.

Auroville: the first six years *is a straight-forward narrative clarifying the abstractions, tracing the unfolding and its implications local and global.*

—Savitra

Auroville
(The first six years: 1968-1974)
Savitra
1974; 102pp.
$2.25 postpaid
from:
Auroville Association
212 Farley Drive
Aptos, CA 95003
or
Auroville
via Pondicherry
605002
India

Auroville has slowly begun to implement simplified alternative energy devices. Four windmill pumps are presently operating in different areas of the Green Belt, and a wind-driven electricity generator is in process at Forecomers. Based on an ancient Chinese design of a horizontal windmill, the structure is being assembled from recycled materials: scrap iron, an old car alternator, cycle wheels for gears, and a second-hand storage battery. Several solar-powered units have been introduced in Auroville, designed, assembled, and installed through ACES: a solar water heater in Auroson's home; two solar cookers, one a reflector-type at Forecomers, the other a steam system at Pitchandiculam; and a small research still. A waste recycling system for methane generation is in design for the first stage of housings in Auromodele, and a smaller exploratory system for Pitchandiculam awaits funding.

•

It had learned through its rigorous and pioneering experience to simplify wants, to discriminate between the extraneous and the needful. That had set the perspective for a true self-sufficiency— the liberation from the consumptive impulse. It was now a matter of organizing an agriculture, or some alternative, capable of feeding the population, and of developing relevant industries to provide the essential goods and services as well as generating income through interchange with outside markets.

The Community Association

A group of people from a wide variety of backgrounds have progressed beyond the talk stage. They have an organization and have completed exhaustive ecological analysis of their land before moving onto it. They've gone through many changes since beginning four years ago, and have already learned a lot. Their newsletter gives a blow-by-blow account of their progress on all fronts. Hard-core information on their council meetings, legal problems & plans.

—J Baldwin

What we propose for the 1,158-acre Cerro Gordo Ranch is a new village community that synthesizes forest and village environments. A friendly small town which respects and enhances the natural environment. Not a commune or a cooperative, not a recreation or retirement development; but rather a self-supporting small town with jobs, school, shops and community facilities.

The Community Association Newsletter
$15 /yr
from:
704 Whiteaker St.
Cottage Grove, OR
97424

Employment: It is clear that there are no jobs available in the Cottage Grove area and members will have to bring their means of livelihood with them. There are many established businesses owned and operated by community members which can be relocated. They include:

Computer equipment assembly (Dynamic System Electronics)
Panel meter assembly (Aero Meters)
Wooden Canoe manufacturing (Wilderness Boats)
Aircraft lighting manufacturing (Scientifico)
Mail order games (Kirographix)
Phonographic equipment assembly (Turner)
Custom furniture making (Cisne, Ltd.)
Organic jams and jellies (Soulberry)
Scientific instrument design and production (Lowenstine)
Dressmaking (Sensible Raiments)
Computer magazine (Computer Science)
Telemetry equipment assembly (Arnoux)
Cedar garden planters (Garden Craft)

I am the woman moving into your life
I write from my heart,
clean as a wilderness yellow.
I say. . . think of me as a meadow.
Unfortunately
I am a house.

People inhabit me.
They bring their dogs, their chewing gum,
their songs.
I open my mouth. They enter like tongues
of fresh air.
From an upstairs eye
a child peeks out,
she is tying her shoes and crying.

My limbs are simply staircases.
They carve their names into my soft wood.
I have fantasies. I say
this is the way it should be, and
who will know me?

I take hold.

At my heart the women knead.
At night they moan
under the hands of their men,
it is their music I live with.

I grow full, from my root
breath rises like seed.
A late sun paints me yellow.

Think of me as a meadow.

—Susan MacDonald

Celery Wine

What it's like to live in a country commune, every day, rain or shine, for richer or poorer.

—DB
[Suggested by Jim Walpman]

Celery Wine
(Story of a Country Commune)
Elaine Sundancer
1973; 176pp.
$2.80 postpaid
from:
Community Publications Cooperative
Box 223
Yellow Springs, OH 45387
or Whole Earth

I've been trying to figure out how I got here. *Here:* twenty people living together, one kitchen, visitors, the garden, no rules, MADHOUSE, mud, brown rice, sunshine. . . I know I never said, "When I grow up I'll live in a commune." None of us planned on this way of life, and yet here we are. It's very strange.

The Hog Farm and Friends

The sequel to The Electric Kool-Aid Acid Test. *Wavy is a hard-workin saint.*

—SB

The Hog Farm and Friends
Wavy Gravy
1974; 195pp.
$3.95 postpaid
from:
Links Books
Quick Fox, Inc.
33 West 60th St.
New York, NY 10023
or Whole Earth

It gets real cozy in the center when everybody's watching out for everybody else like at Yale University. In the middle of all the rock and roll, my brother-in-law let loose five live frogs on cue. I grab a mike. "Don't anybody move! Some nut has just let loose five live frogs!" And the hunt was on, like looking for jumping contact lenses, but we brought 'em back alive. It was a calculated risk and it worked.
Later we all laid on the floor with his head on her tummy and her head on somebody else. Not freaky at all but warm and snuggle. After a while I asked to be passed around. Over the top of the pile. Everybody lend a hand, and I'm skimming along at a pretty good clip and it really felt nifty. Then we sent Tooker aloft. The baby of Barry and Moe. He's maybe two and bald like a Buddha. Talk about total attention. Hand over hand, it was really quite grand with Tooker on top of us all. We can fly with the help of our friends.

•

Whiterabbit Shits from a Moving Bus

WAVY GRAVY, Hugh Romney. Professional tongue-dancer and well-known invalid. Author of the great book, *The Hog Farm and Friends*.

B. B. King was lookin for a beer. A cold quart appeared in his hand. He took a slow swallow and passed it out to the people. In Texas, folks take the blues seriously. Everybody knew how each of them wanted a sip of B. B. King's beer, so they took it and passed it and somehow it lasted. Like loaves and like fishes on a lone prairie. It came back to B. B. with a swallow to boot.

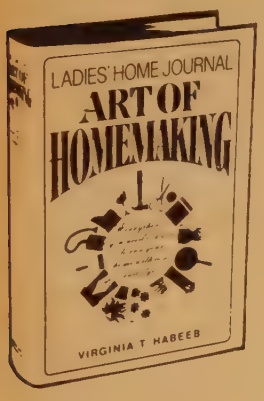
Earth People's Garbage

COMMUNITY

Ladies' Home Journal Art of Homemaking

Comprehensive reference for those whose mothers never taught them. Its focus is on staying organized behind a myriad of household chores; its strongest point that it covers care of current fabrics, furniture, & appliances mother never heard of. It gives concise how-to instructions for every imaginable routine, and then encourages you not to be too compulsive—— an attractive paradox.

—DB



Ladies' Home Journal Art of Homemaking
Virginia T. Habeeb
1973; 588pp.
$9.95 postpaid
from:
Simon & Schuster
One W. 39th St.
New York, NY 10020
or Whole Earth

To remedy a sagging cane seat, dampen it and let it dry slowly. Repeat process until it returns to shape.

Wet all bamboo, cane, reed, rattan, or wicker furniture about once a year to prevent drying out or splitting. Take it outside if possible, and use the fine spray of a garden hose or wet it down under a shower, if possible.

If furniture is enameled or painted, follow directions for cleaning painted furniture.

Do not use water if the finish can be damaged by it.

▪

Avoid the use of chrome near the seashore, as salty air is apt to corrode it. Stainless steel is a more durable material and will not corrode. To clean it, use a little ammonia and water, a spray glass cleaner, or a special stainless steel cleaner.

Tip: Leftover carbonated water or club soda is excellent for cleaning chrome and stainless steel. We learned this trick from a friendly bartender!

▪

WHEN YOU USE A CLOTHESLINE

Despite the increased popularity in the use of automatic dryers, many still prefer to use the clothesline, or if they don't prefer it, they are doing it out of necessity. While it is harder to lug the laundry to the clothesline, drying out of doors does give clothes a lovely fresh smell. An indoor line is also necessary for those bad-weather days. If you don't have an area where you can leave the line up at all times consider one of the indoor retractable types. Hang it in a spare room or bathroom.

To hang sheets, fold them double, hem to hem. Turn about three or four inches over the line and pin, or fold in half if that is easier for you (make sure the pins are snag free and clean). Run your fingers down the selvage edges to make sure they are smooth. If you hang them this way, sheets will dry evenly and will be easier to iron. As a matter of fact, they may well be smooth enough so that ironing is unnecessary if you fold while faintly damp (only enough to feel coolish to the touch). If they are permanent press sheets, then your ironing worries are over!

To hang men's shirts, first fold double by bringing the two shirt fronts together, then hang by the tail, folding three or four inches over the line. Pin at the ends.
We like to hang permanent-press shirts on hangers for drying. Secure the hangers to outdoor lines with clothespins.

To hang towels, fold either one third or double over the line. Shake them vigorously, to restore softness and fluffiness. Never hang by one corner.

Hang clothes into the prevailing wind so that pajama legs, sleeves, etcetera, will billow and smooth out as they dry.

Hang dresses, trousers and pants, knitted garments, and any items you want to hold in their original shape on hangers and secure the hanger to line with clothespins.

Wonderful washing machine

Hitachi makes a small washing machine that uses no power other than a few turns on a crank. A modest filling of hot water draws a vacuum in a spherical chamber as it cools, sucking dirt out of the clothes. Obviously it could be adapted to a solar heat source. They say home (Japanese) market demand is so great that they can't import it, but we've seen one work and think they ought to be encouraged to do so. We'd gladly help publicize the wonder device.

—JB

Hoky's gentle whirring does not disturb nursing Teddy.

Hoky Floor & Carpet Sweeper

In the fall of 1973, I came across Victor Papanek's profound **Design for the Real World**. Happily, about the same time I bought a Hoky sweeper from a neighbor.

"The Incomparable New 2-1/2 Pound Hukuba Hoky 23A Floor and Carpet Sweeper—— Ideal for Homes, Offices, and Businesses," begins the full-color, 4-page brochure accompanying each Hoky. Talk about a well-designed product! It's hard not to use plenty of superlatives (all honestly earned) to describe the Hoky.

Static electricity and great design are the "secrets." Small 9" x 7-1/2" x 2" (with 3-part handle extending to 43"), but mightly. Light, but no toy. Heavyduty steel (able to support 150 pounds) throughout. Only non-steel exceptions being soft rubber wheels and bumper band (to protect furniture), finest boar bristle rotor brush and 4 exclusive corner brushes (for getting right next to baseboards, into corners, etc.) and a plastic hand grip.

Since the rotor brush doesn't come into contact with the f dust and dirt are not scattered as with some carpet sweeper And for the same reason, bare floors are just as easily clean as carpets. The Hoky also effectively handles hard-to-pick litter like cereal, sand, lint, metallic objects, etc.

Versatility personified—— the adjustable handle makes it great for cleaning stairs. No awkward hoses/cords or heavy vacuums to lug up and down. The very low 2" profile makes it great for cleaning under the lowest furniture—— without breaking your back in the process of moving it around!

Easy to keep clean too. Specially designed (curved) Hoky brush (provided of course—— no expensive accessories are needed) easily cleans rotor brush, which can also be washed Baked enamel coating permits entire unit to be washed with fear of rust.

No need to bear down. Long, easy strokes provide the static electricity that does the work. Three-year-olds (or younger), nursing mothers, oldsters (or anyone) confined to wheel chairs and convalescents all can use the Hoky with equal ease.

The Hoky's gentle whirring sound will not disturb TV viewers, stereo listeners nor nursing/sleeping babies. Great in restaurants—— while people are eating. Slim, attractive design doesn't upset the eyes either. Hoky's don't need to be hidden in dark cubbyholes—— they make great conversation pieces.

And talk about energy conservation! No additional fossil fuels, just a few human calories. Look elsewhere if you want to work up a sweat! Great for tent campers in the boonies or for back-to-the-landers avoiding commercial power.

Oh yes, the Hoky is a veritable mini-U.N. with patents in Canada, F.R. Germany, U.K., USA and Japan and is made in Taiwan for Hukuba Kogyo Co, Ltd, Japan.

In short, I was so enthusiastic that my neighbor suggested that I sell them too. . . so here's to your good health, happiness and Hokying. . .

$22.72 (ppd & insured)

John Weber
3022 Bondesson St.
Omaha, NB 68112

101 Practical Ways to Make Money at Home

Down to earth ideas, advice, resources for padding the family income without going so far as to take a job. Especially for parents who want to be at home with young children; sound appraisal of "the pleasures & problems" of such arrangements.

—DB

101 Practical Ways to Make Money at Home
Editors of Good Housekeeping
1971; 312pp.
$5.95 postpaid
from:
Good Housekeeping Books
Hearst Books
Box 2316, FDR Station
New York, NY 10019
or Whole Earth

By the time children are in primary school, though, they will be out of your hair most of the day. In addition, children of this age group can staple, fold letters, stuff envelopes, and perform many other simple but helpful tasks. They can also take the younger children off your hands occasionally, and do extra household chores.

Teenagers who can type are invaluable for corespondence and paying bills. In addition, they can file, answer the telephon make posters, hand out advertising flyers, and, if they drive handle pickups and deliveries for you.

How do you get all this help? That's simple. If your kids ar young, you tell them it's fun, and they will believe you and enjoy sharing in your activities. If they are older, you pay them. Whatever their age, you do your best to make them feel partners with you in a family enterprise, rather than victims of a situation that deprives them of much of your time and attention without any compensating benefits.

•

The pluses of *individual proprietorship* include fewer tax complications, a minimum of government regulation, and flexibility in operation. You sign all contracts in your own name, report all income on your personal tax return. On th other side of the coin, you must take personal responsibilit for business debts, you sometimes pay more in taxes than you would if you were liable for a corporate tax, and you may have difficulty in getting loan capital.

A *partnership* may be desirable if you find you need help—financial or otherwise. Partners pool their resources and talents to run the business and share, according to the term of the partnership, in its profits. Each partner reports on his personal tax form his proportionate share of the income of the partnership. A drawback of this form of organizatio is the fact that each partner is personally liable for the business debts of both himself *and* his partner(s).

A *corporation* is a statutory form of organization, a separate entity under law, with ownership represented by shares of stock. The biggest advantage of a corporation is t if your business fails and you can't pay its debts, your personal liability is limited.

Idaho Letter

dear epilog

alladin lamps are kerosene gobbling, temperamental, luxury lamps they use just about twice the kerosene per time unit as the standard flat-wicked glass bowl kerosene lamp. alladin mantles travel no better than coleman mantles. there is a bright side: for close work, like embroidering tarot cards on shirt pockets, the alladin gives about twice the light of the flat wicker, if folks bought everything but the font, or fuel container, how much would they save? would it make it worthwhile to use a pound prince albert can, for instance?

the handyman jack, or mountain jack as they call them around here, are good lifters. we broke the shear pin on one lifting the downhill side of a 16 by 20 log cabin, a little stronger shear pin and a four foot cheater, and the house came pu. used one as a cider press. in the middle of the winter. by notching out a power pole to jack up againse and putting the butt down into a round plunger rigged into a worn out three gallon canner, we pulled out the powerpole and got apple toothpaste out of the holes drilled in the canner.

the hohner marine band harmonica. if you start by blowing, you stay in the key of the harmonica. if you start with a suck, you cross the harp, and come in backwards to the song, blu

i think the keseys make the gallon plastic jub that you buy milk in around here. the jugs get used for more than milk. we haul drinking water in them, cut in half and upside do you get a funnel, with the bottom half used for rabbit wat with the handle left on and the quarterface opposide the handle cut out, its a water dipper, with the handle left on and the quarter face below it cut out you can catch crank-case drainings. i saw a pole lamp in mccall with the top halves being used as shades. snowmobilers are strapping gas in them. larry usee the flat sides and cut out the alpha for the kids to trace around.

grey duct tape: arno, michigan city, indiana, 46360, 2 inches by sity yars, grey supertape, but not as super as what the government uses to steamfit its battleships. seem like a citizen should be able to buy anything that the government can.

well, that's all,

love,
jd

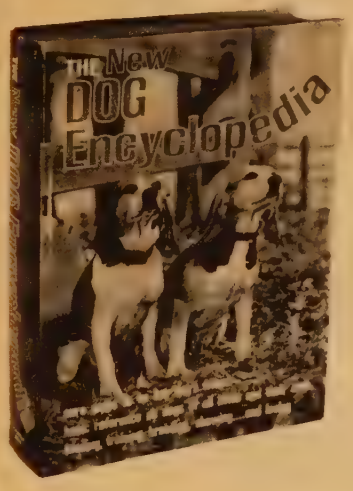
Burgdorf, Idah

The New Dog Encyclopedia

If you're really into dogs, and not as just a casual weekend hobby, Henry P. Davis's updated classic will provide you with a well-rounded source of information on choosing a dog, caring for it, first aid, training and breeding plus a background on the uses dogs have been put to from aiding the blind to guarding military installations and herding sheep to hunting deer. Included are chapters on the history of the dog, different breeds, dog classifications, dog types around the world, and major world kennel clubs.

Depending on who contributed to what section, information is sometimes general and sometimes specific, for example in the chapter on kennel clubs where all the obedience and field trial rules are printed verbatim. If you're specifically interested in caring for and training your Irish Setter to be a good companion dog, the New Dog Encyclopedia *'s too expensive and too broad in scope to be of value; however if you work with dogs a lot and are really interested in developing a broad background on them then this book would be a good buy.*

—AP



The New Dog Encyclopedia
Henry P. Davis, Ed.
1970; 736pp.
$24.95 postpaid

from:
Stackpole Books
Harrisburg, PA 17105
or Whole Earth

Never vary commands. Make them always the same. Thus you preclude any confusion or uncertainty.

Never work or hunt your dog except with his equals or peers If you go with men whose dogs will but spoil yours, leave them and hunt alone—— or if you go with them, don't take your dog.

Never lend your dog to anyone, not even a best friend—— any more than you would your wife. If you lend your dog to a friend the chances are you won't be friends for long.

Never nag at a dog; when you speak to him, mean it. The dog constantly nagged at will never amount to much—— and can't.

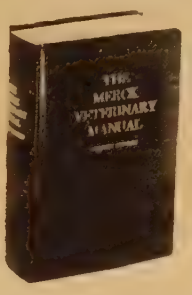
Never punish if in doubt. Always give the dog the benefit of any doubt. But if punishment is unconditionally called for, make it severe enough to count. Thus once should suffice for any given infraction. . . .

Never tease a dog. Respect him and earn his respect. Don't accept partial or slovenly performance. Insist that the dog perform completely any task, as he has been taught he should.

The Merck Veterinary Manual

Very technical descriptions of diseases and injuries in animals; diagnoses and treatments. Written for vets, probably useful for anyone caring for animals. Merck doesn't restrict this book's sale, as it does for the Merck Manual *(Pg. 214 the human equivalent), so it's easy to get.*

—DB



The Merck Veterinary Manual
(A Handbook of Diagnoses and Therapy for the Veterinarian)
1973; 1600pp.
$14.00 postpaid
from:
Merck & Co., Inc.
Rahway, NJ 07065
or Whole Earth

EXOTIC AND ZOO ANIMAL NUTRITION

SPECIAL MIXTURES FOR MAMMALS

Otter	**Anteater, Aardvark, Aardwolf**
Daily:	Mix together:
2 lb fish ½ lb raw meat ½ lb mixture of ground meat, dog or mink food and bone meal, with vitamin-mineral concentrate added (minimum 10 mg thiamine/lb of fish).	4 boiled eggs 8 oz ground meat 8 oz evaporated milk 16 oz water 2 oz Pablum or canned dog food 8 oz dog pellets Multivitamin-mineral concentrate Mix in blender for best acceptability.

9

THE SCIENTOLOGEEK AND THE FRANKFURTER MAKER

"Crap," is how Captain Mediafreak answers the camp phone. He's in charge of the switchboard. "Yeah, this is me....Hey, Mom, how you doing?...Are you kidding? They started the summer re-runs in the spring .... Well, I'll tell you, my TV was always warmed up, even when it wasn't on— which means the power was going twenty-four hours a day— and one night I caught myself switching on the set and realizing the utter absurdity of saving a few seconds before a program on the energy shortage came on— sponsored by an oil company, yet— so I just decided to give it all up and flew out here. Besides, Tongue Fu was beginning to get hooked on the tube... He's out getting me a hot dog right now..."

Waiting on the line leading to a frankfurter stand, Tongue Fu is showing the photograph of his half-sister to a follower of Scientologeek standing in front of him, who doesn't recognize her, but takes out a photo himself.

"This was my brother. He's the one who supposedly drove that motorcycle into the bank. But I absolutely don't believe he killed himself. We talked about suicide once, just an intellectual discussion, and he said he would never consider it because he preferred to shun irrevocable decisions. I think he must've been hypnotized by the Communists."

He is holding an empty soup can in each hand. They're attached by wires to a Geek-Meter, which he glances at while he speaks.

"Oh, good," he notes, "I'm telling the truth again."

When he reaches the front of the line, the Scientologeek requests, "One hot dog, please"— holding up his index finger in a gesture indicating one that he is convinced must have originated with cave dwellers— "and could you make it well done?"

The frankfurter maker takes the hot dog that's closest to him on the rotating machine and sticks it inside a roll.

"Excuse me, I asked for well done."

"This is well done. Show me one that's well done."

"There." The Scientologeek points toward a hot dog that appears well done. "That one."

"All right," the frankfurter maker snarls, "you want that one, I'll give you that one, but it's raw."

"Never mind. I'll take the one you already fixed up."

"Look, you ignorant bastard, I've been cooking hot dogs on this machine for ten years!"

The Scientologeek stands there, the eternal customer, thinking: *Where's the manager? I'm going to call the manager!*

The frankfurter maker stands there, the eternal merchant, thinking: *How many times do I have to tell you? Ain't you never gonna learn?*

The Scientologeek checks his Geek-Meter to determine the validity of his emotion ....

Flashiebackie:

At a Scientologeek church meeting, the minister is concluding his sermon to a congregation of smiling faces.

"And so it is important, in understanding unhappiness on the job, to be cognizant of the fact that an individual who relates to the universe through a machine has a tendency, first to imitate the motion of that machine; then to become assimilated with the content of that machine; and finally to become subservient to that machine. It becomes an object of worship, and justifiably so.

"The machine is a central clearing house for the basic needs of that worker. It provides him with a source of income. It provides him with a circle of like-minded companions. But most of all it provides him with an unbounded objectivity which renders subjective praise of the machine itself unto a state of clear contradiction.

"But it functions ...."

Tongue Fu orders "One hot dog with everything on it, please. And a large Payola-Cola."

The frankfurter maker grasps at a straw and pulls the proper spigot.

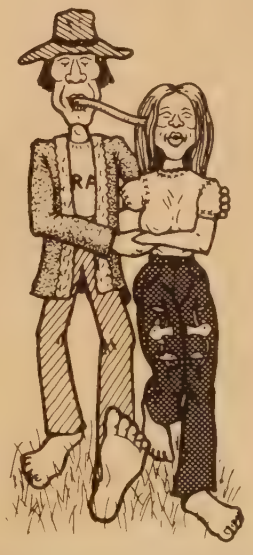
On his way back to the office where Captain Mediafreak is waiting, Tongue Fu sees Rosebud Zwalyimeh, and they walk there together, arms linking. He tells her about his encounter with the Scientologeek.

"Self-hypnotism," says Rosebud. "That's what this camp is really all about. It's a transformation of the cultural programming toward romance, where you keep focusing on the image of the person you care for. Only now, instead of a sexual object, there's a constant refocusing on the guru of your choice."

"I do not need a Geek-Meter," says Tongue Fu, "to tell me that I love you."

"You know," sighs Rosebud, "I was raped a few years ago by a dude who said 'I love you' just before he came. And those words have never been the same to me. So just put your sweet tongue in my ear and you don't have to say anything. I'll know."

Without losing step or moving his head any closer to hers— relying entirely on peripheral vision— he places his tongue comfortably in her ear, and they continue walking.



A television camera person approaches them, film rolling. Tongue Fu whips his tongue out of Rosebud's ear with almost invisible swiftness, and with it he turns the camera around one hundred eighty degrees so that the lens is looking back over the camera person's shoulder, and then just as swiftly Tongue Fu returns his tongue to Rosebud's ear.

"Ooh, that felt good," she says. "Do it again."

Tongue Fu removes his tongue from Rosebud's ear but instead of returning it he explains his act: "The camera saw my tongue in your ear but out of context."

"Can't you keep talking while your tongue is still in my ear, just like they do in the comic books?"

He tries, but his words are inaudible.

When they reach the office, Captain Mediafreak says, "My mother sends her regards."

A radio bulletin announces: "Another development in the Better Your Exit kamikaze case. Police say they have discovered a mysterious Oriental ear in the debris at the Chase-Folly Bank. Further details concerning this new clue on the six o'clock news."

The telephone rings.

Rosebud says to Tongue Fu, "If you think my ear would be out of context— "

Captain Mediafreak picks up the phone and says, "Bullshit. I mean Crap."

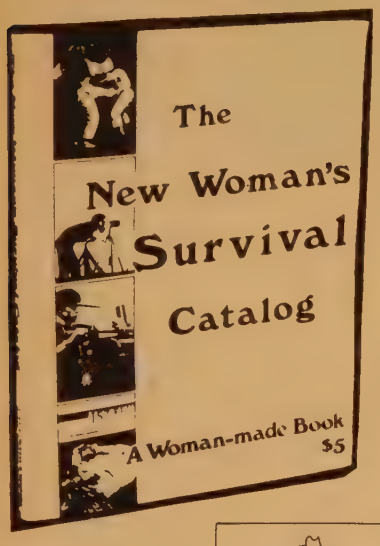
[Continued, page 589]

COMMUNITY

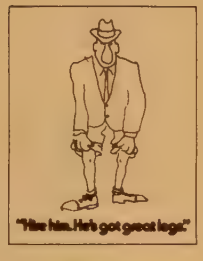
The New Woman's Survival Catalog

The Catalog succeeds in guaranteeing survival to any woman teetering on the brink of alternatives—— and provides some next steps if the answer isn't already here. This edition should elicit lots of feedback insuring future editions of more than the obvious sources listed. One Boo!: I would have hoped the ladies could have turned out something more than another in a long line of Last Whole Earth Catalog *imitations, down to graphics and print type (albeit better than most of the imitations flooding the market). One yay!: The editors have established a trust fund to return a minimum of 20% of their royalties to the Women's Movement.*

—Carole Levine



The New Woman's Survival Catalog
Kirsten Grimstad &
Susan Rennie, Eds.
1973; 223pp.
$5.00 postpaid
from:
Coward McCann &
Geoghegan, Inc.
Berkeley Publishing Corp.
200 Madison Ave.
New York, NY 10016
or Whole Earth



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HOW TO START A
RAPE CRISIS CENTER

Available from:
The Rape Center Women
P.O. Box 21055
Kalorama St. Station
Washington, DC 20009
$3.50 postpaid

Button available for 25¢ from:

KNOW, Inc.
P.O. Box 86031
Pittsburgh, PA 15221

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Wanted by the Law: Women

Ninety-six-and-a-half percent of all the lawyers in this country are male. Women are realizing that it is male legislators who are passing the laws which control women's lives. "It is male legislators who pass laws giving all control of marital property to men. It is male judges who in effect condone putting rape victims on trial to facilitate acquittal of rapists. It is male administrators who insist that the homes of welfare mothers be searched at night without warrants, and it is a male judiciary that upholds this practice. It is male lawyers who fail to pursue women's issues because they consider them frivolous."

Pamphlets are available from:
The Boalt Hall
Women's Association
School of Law
Boalt Hall
University of California
Berkeley, CA 94720
50¢ each

•

Six out of 10 women would work even if they could receive the same amount by staying at home, a major new survey on women reveals.

•

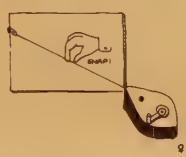
Some 82 percent of those interviewed agreed with the statement: "Working makes me a more interesting person." Some of the other reasons advanced for wanting to work were: "I want to be more independent" (36 percent); "I want to do something worthwhile" (35 percent); "I like to learn new things" (35 percent).

Country Women

This good little magazine has so much country how-to we almost put it in the Land Use section. Land Use for Woman Freedom is what it is.

—SB

Country Women
$4 /yr (6 issues)
$ .75 /single issue
from:
Box 51
Albion, CA 95410



The chalk line is another tool of unlimited uses - as many as you can dream up. It's a string wound up in a container of chalk(refillable). Pull the string out, hold it tight at both ends, and snap it in the middle - an automatically straight line is marked for you. Good for marking a line to cut plywood, for example, especially if you have to cut an angle; or to put a mark to line up the bottom plate of your wall.

WRECKING TOOLS also deserve a whole discussion. For one thing, they're useful in ways besides tearing things apart or down. For example, when you're working alone, pry bars are handy as shims or leverage, holding something up until you get it nailed. Besides crowbars of various shapes and sizes, I'd like to mention 2 other wrecking tools.

The wonderbar is indeed a wonder, with many applications and advantages. "Wonderbar" is a trade name (it goes by other names too) for a small, flat prying tool. It's easy to handle, not burdensome to drag around like a crowbar, and it fits on my tool belt. Never-the-less it is good at prying, nail pulling, even crude chiseling. It's my favorite and most often used wrecking tool.

Rebirth of Feminism

The best kind of journalism; impartial, lively, thorough, and (whew!) no rhetoric. Past & current history of the movement(s) for women's rights, the gains, the struggles, the internal arguments. Educative.

—DB

Rebirth of Feminism
Judith Hole &
Ellen Levine
1971; 488pp.
$3.95 postpaid
from:
Quadrangle Books
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Cream Rises

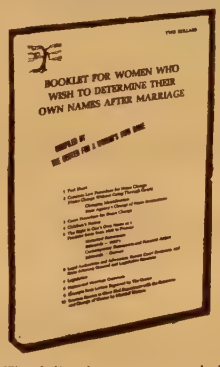
WOMEN

Our Bodies, Ourselves *Self health* 221
New Woman's Survival Catalog *Access* 582
Country Women *Independence* 582
Rebirth of Feminism *The movement* 582

Booklet for Women Who Wish to Determine Their Own Names After Marriage

If you are about to marry and wish to retain your own nam or took your husband's name not knowing there was an alternative and now wish to change your name, this booklet will tell you what to expect when you try (and even after y succeed). Compiled by a non-profit corporation which see to end discrimination against women who want to determi their own names, it lists sources in each state who have had experience with the retention and change of womens' nam after marriage, and covers Common Law procedure, Court procedure, recent court decisions, and excerpts from letter received by the Center. Did you know that only the state of Hawaii requires a woman to adopt her husband's name?

—Pam Cokeley



Booklet for Women Who Wish to Determine Their Own Names After Marriage
Compiled by
Center For a Woman's
Own Name
1974; 56pp.
$2.25 postpaid
from:
Center for a
Woman's Own Name
261 Kimberley
Barrington, IL 60010

Changing Identification

The following recommended procedure for women who h changed their names out of court after first using their husbands' names and who wish to procure new records is based on the laws and practices of Wisconsin, Illinois, Pennsylvania, and California agencies and institutions (sta will differ).

1. Change your Social Security card.
2. Change your state university registration.
3. Change your driver's license and car registration.

After receiving the above identification:

4. Change your employment records and accompanying insurance, retirement policies, etc. (The Social Securit Administration requests that one's card be in the name which one works. Thus, sometimes employment recor are most easily changed immediately after the changin of one's Social Security card.)
5. Change bank accounts, credit cards, leases, etc. (It is sometimes easiest to change these records first.)

State and federal departments of revenue, all other creditors and interested parties should be notified of the change of name.

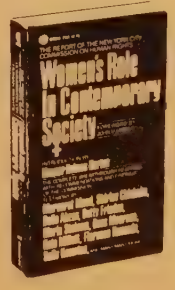
•

"This reminds me of the experiences I had with doctors a dentists who would send my bills for MY teeth or MY all to Bill. I seethed over it for quite a while then marched myself up to them and threatened to send my payment t their wives. They got the idea, and I'm now getting my o bills. I really resent being treated as an incompetent." (J Healy, Illinois.)

Women's Role in Contemporary Society

The Report of the New York City Commission on Humar Rights in 1970—— Focus is on social discrimination (educ jobs, wages, the arts, the law, politics), from many differe points of view. How stereotyping and inequality work o concrete level, not much on what to do about it.

—DB

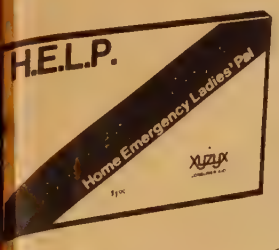


Women's Role in Contemporary Society
The Report of the New
York City Commission
on Human Rights
1972; 800pp.
$2.45 postpaid
from:
Avon Books
250 West 55th St.
Order Dept, 8th Flr.
New York, NY 10019
or Whole Earth

H.E.L.P.

Best household fix-it book I've seen. Clear & easy diagrams & instructions for common problems with plumbing, gas & electrical systems, carpentry, general safety. Ignore the "Ladies Pal" part of the title; it's far less offensive than similar books "written for women" that assume a five-year-old intelligence.

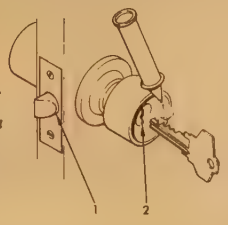
—DB



Home Emergency Ladies Pal
Xyzyx Information Corp.
1972; 154pp.
$1.99 postpaid
from:
Xyzyx
21116 Vancouver St.
Canoga Park, CA 91303

Sticking Door Locks

Lubricant should not be applied in lock keyway [2]. Lock tumblers must exert a certain amount of friction to work latch [1]. Lubricant will gather dirt and restrict proper operation of tumblers.



Apply light coat of lubricant to door key.

Insert key in keyway [2]. Operate key several times.

Using a cloth, wipe excess lubricant from keyway [2] and key.

Operate door lock several times.

If door lock still sticks, door lock mechanism must be overhauled or replaced. Call a locksmith in your area.

The Barber Shave vs. The Ripoff Shave

Unless you're a real little leaguer we must share the memory of barbers and civilians caressing each others' faces or the left and right sides of one face or some other comparison, ad nauseum. The point is that the barber shave has been conceeded to be the best by anyone that has had one. It isn't the basis of comparison anymore because nobody remembers. Well, let me tell you, it's still great.

I bought a straight razor for $2 and a strop for $5, both used from (of all people) a barber. I went to the old style barber shop (with the moose head somebody shot before it was disgraceful) where I went when I was little (and where I quit going when I wanted longer hair and found I couldn't trust them). These guys all seem to have a drawer full of old razors that lost their shine. They try out new ones like you'd try out flavors of ice cream. When I bought my razor I had 10-15 different razors to choose among from the guys in the shop. They were all happy to unload them and even discounting the ones that were worn out, there was quite a choice (if you go to buy one new it will cost 5-10 times as much and don't expect a selection). All the guys in the shop gave me tips for sharpening and using the thing too— I was an instant expert.

You do need to be initiated by someone who knows but it is worth the trouble. It takes less than $15 capital (razor, strop, stone, brush, soap) and you're set for 10 years' shaving.

It might cost another dollar or two per year for soap but that's all. You get the best shave, complete self-sufficiency, and a tremendous bargain at a stroke. If you drop $40 on an electric, $5 per year on tune-ups (plus pre-shave, electricity, etc.)— no bargain for a 2nd class shave (and a new razor in 5 years). The safety razor is no prize either. An endless supply of blades, aerosol foam, etc.— the expense is staggering. You become a stainless steel junkie. And that is clearly a second-class shave too. It might get as close (the double blades *still* don't win, always) but it takes narrow, short strokes. A straight razor can take your whole face in big, wide (and wear-saving) strokes. And did you ever try to cut off sideburns, go around a beard— square it off underneath. A couple of strokes through real hair and a safety razor looks like a paint brush (and cuts as well). A straight razor can't clog. You get the same shave in the same time whether your last shave was yesterday or 20 years ago.

Talk about common sense, perishable resources, crass commercial exploitation. . . , if there was ever a case of people's habits being reoriented to generate consumption for its own sake. . . .

Roger Hyde
Los Angeles, CA

Editor's question: any reports from women on straight razor advantages?

—SB

RIGHT RUNNING. . . .

it can be a pathway to self-discovery

by Dick Raymond

Right Running— as in Right Livelihood— is an idea that depends on a universal truism: to wit, no two thumbprints and no two people are just alike, and every person can do *something* better than anyone else. Now add one more truism: that each person must (and can) discover that special "something" for her or himself. Which brings up the Big Q: "how do I find my very own 'right running?' "

I have run for a long time— well, & not wisely, but long enough to have made a lot of mistakes. Eventually, I began wondering about right running and turned to reading and thinking more seriously about it. Now I can happily recommend some references for anyone who wishes to enjoy running well. But I'm not talking about competitive or championship performers; they are another class, with advisers and techniques definitely beyond my level.

My recommendations will mean more if you can accept two personal premises.

First premise. It is more rewarding to ask good questions than to acquire a vast collection of everybody's answers.

Second premise. It is probably more important to learn what *not* to do, than to memorize a bunch of rules to follow. (Remember how the sculptor makes an elephant out of stone: she chips away everything that's not an elephant.)

Here are some questions, for example, that bugged me:

1. What about breathing and breath— what's that got to do with the lungs and the heart, and ultimately with the feet pounding on the road?
2. What makes my ankle sore, or why is my lower back aching after a long run on a hard surface?
3. How fast should I run a quarter mile or a mile? Should I be concerned with speed?
4. Is LSD training (Long Slow Distance) better than interval training, or can I combine both somehow?
5. What do I gain from exercises, and what exercises should I be doing?

Of course, I have many more questions than these, and for a long time I tried to deal with them intuitionally. Finally, I read damn near everything around, and— as you might have predicted— I learned that my intuitions were extremely worth listening to, and ultimately more useful than books. Still, several books were indispensable.

A. Start with Breath and Breathing

What every runner ought to know: Your heart is probably the main organ for right running. Once you accept that, you will immediately recognize the value of right breathing, and also why breathing *out* is of more concern than breathing in. (Your body will instinctively take care of proper in-breathing.)

My favorite and life-changing book on this subject is **Doctor Breath**. It was written by the man who was called in as a special adviser to the Olympic track team that trained at Lake Tahoe for the 1968 Mexican Olympics.

The other basic text on this subject is **Aerobics**, by Kenneth Cooper, M.D. (Pg. 212). Reportedly, millions of people have read this book, which includes a graded point system enabling you to determine how much exercise you must do for maximum good health. Aerobics is a form of exercise which forces the body to consume increased amounts of oxygen, and produces benefits not just to skeletal muscles but to the whole body.

I might not have appreciated either of these books if I had not been already interested in the Alexander Technique which deals with body functions at even a deeper level, that is, how the body *and* the mind relate and how a person can regain the instinct for using the body naturally, which is an instinct almost lost to modern civilization. A book is not the right way to learn Alexander Technique, but one helpful publication on the subject is **The Alexander Technique**, by Wilfred Barlow.

B. Add Something Technical About Runner Conditioning And Body Structure

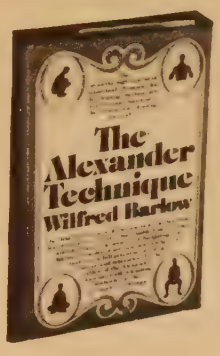
There is certainly nothing wrong with most of the several dozen books, bulletins, and booklets covering the subject of running. (World Publications, Box 366 Mountain View, CA 94040 is a bottomless pit for avid readers in this field.) There is one publication, though, that I would not be without— it's only 29 pages, but 30 pages would be one page too many. It coherently summarizes and integrates LSD theories with interval training theories and supports anyone who prefers to understand running by intelligently using a "trial—error—success" approach: **The Conditioning of Distance Runners**, by Thomas J. Osler, $1.40 postpaid from World Publications.

To accompany this I would recommend placing an order now for a book to be released soon called **The Complete Runner**, edited by Joe Henderson, who doesn't claim to be a first rate runner, but surely is a first rate writer for runners. World Publications can fill your order; they can also send you a *long* suggested reading list.

C. But For Balance, don't forget the rich philosophical aspects of running. You might enjoy another Joe Henderson book (112 pp., $2.59), called **Thoughts on the Run**— also World Publications. Especially, when you get to be 80 years old, you may argue this is the *only* important part of right running.

•

Dr. Breath, The Story of Breathing Coordination
Carl Stough with Reece Stough
1970; 255pp.
$6.95 postpaid
from:
William Morrow & Co Inc.
Wilmor Warehouse
6 Henderson Dr.
West Caldwell, NJ 07006
or Whole Earth



The Alexander Technique
Wilfred Barlow
1973; 221pp.
$7.95 postpaid
from:
Alfred A. Knopf
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Collapse and depression. Loss of depression with loss of collapse.

The Alexander approach reverses the psychotherapeutic approach. The psychotherapist says, "You will only get rid of your unwanted behavior in a satisfactory way when your mental attitudes have been sorted out." The Alexander Principle says, "It will be impossible to sort out your mental attitudes in a satisfactory way as long as you persist with that faulty manner of use."

Running Shoes

I'm talking about running shoes, not track shoes. Track shoes have spikes in 'em and the guys you see race on TV wear 'em.

Running shoes are what these world champion athletes do all their workouts in. Many of these guys run upwards of 20 miles a night, and they need good, comfortable, strong, sturdy shoes.

Good running shoes are the most comfortable shoes in the world. They also last forever if you take good care of 'em. Figure— if a guy can wear these shoes for his 20 miles a night and still stay comfortable, think how comfortable you'll be in your ordinary walking around.

Running shoes have been developed (and changed radically for the better) in the past ten years by 2 Japanese firms, *Tiger* and *Nike*. *Adidas* and *Puma* are more famous, but they make flimsier shoes and charge more.

Tiger and *Nike* make both leather and nylon shoes. The leather shoes will last forever if you occasionally rub the uppers with leather balm and resole 'em as they need it.

The nylon ones will not last forever. However, they're cheaper, more comfortable, and they *do* last a long time.

Running shoes aren't designed to be used as work boots— but they do work very well for people who walk around a lot (postmen, store people, hitchhikers). They also look cool, and if you loaf around in them people think you're a track star.

The Nike *Cortez* ($21.95 postpaid from Dakan) will last forever. It is *the* basic running shoe. It is contoured to your foot.

The Nike *Obori* ($15.95) is the most comfortable shoe in the world, but also gives your feet some support. The winners of the Boston Marathon in '73 wore 'em. Cheaper and more comfortable, but will not last forever.

—Joseph Kenny

Available at many sporting goods stores and by mail,

Brochures
free from:
The Athletic Department
(Mail Order Dept.)
Box 743
Beaverton, OR 97005
and
Dekan Athletic Equipment
c/o Dick Pond
879 Duane St.
Glen Ellyn, IL 60137

COMMUNITY

COMMUNITY

The Old House Journal

Items such as "Teaching a Fireplace Not to Smoke" and "Antique Wallpaper Preservation" fill this splendid new monthly. Restoring old houses is a Good.

—SB

The Old House Journal
R.A. Clem Labine, Ed.
$12 /yr, monthly
from:
199 Berkeley Place
Brooklyn, NY
11217

After filling cracks, next most common plaster repair is patching holes made by electricians and plumbers. One particularly vexing type of repair is the "bottomless hole"– made when a workman pokes a hole through both plaster and lath, and there's nothing at the bottom of the hole for the plaster to adhere to. One way to cope with this situation is to rip out enough additional plaster so that the two adjacent studs or beams are exposed. New lath or sheetrock can then be nailed to the studs and plaster applied in the conventional manner. (More on this later.)

A simpler and less messy solution is to stuff wadded newspaper into the hole until it catches firmly on the sides and back of the interior partition space. Then after wetting edges of the old plaster thoroughly, apply thin coating of plaster of paris to the newspaper and the edge of the hole. Let plaster set for 20 min., then rewet and apply another thin coating of plaster. After repeating a couple of times, you'll build up a firm plaster base and can then proceed to patch in the conventional manner. Build plaster up to within 1/8 inch of the wall surface. (Leave base coats rough to give adhesion for the top coat.) Use trowel to get smooth finish on the final layer.

Don't Go Buy Appearances

A valuable little book on what to look for in buying a house. How to evaluate foundations, dry rot, electrical and plumbing systems. If you can make an accurate estimate of repairs needed, you'll know better what you're getting into and how much to offer.

—LK

Don't Go Buy Appearances
George C. Hoffman
1972; 84pp.
$1.50 postpaid
from:
Ballantine Books, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

I first stand back about twenty feet and eyeball the house from all angles. Line up a wall. You can tell if the house is twisted or leaning a little. Sight down a wall from top to bottom and end to end. The corners should line up. If they are 'way off, make a note, and we'll look to see the cause when we get closer. It could be settling in one corner from termites, dry rot, poor foundations, or maybe it has tipped slightly because it has no diagonal bracing.

Historic Preservation

The historic preservation movement has grown rapidly in the United States in the last ten or fifteen years. In many cities across the country, buildings of historic and architectural merit have been saved from wrecking balls, and some historic neighborhoods have been rescued from decay and destruction to become revitalized. The value of buildings less than 100 years old is also being recognized and with luck this will mean that some of the great buildings of *this* century will be preserved, as well as those of the Colonial or Victorian periods. Hopefully, a new awareness of the urban environment and acceptance of recycling as a way of life will enable the preservation movement to continue to gain momentum.

The best resource to date is the National Trust for Historic Preservation. The National Trust was chartered by Congress in 1949 to "further the national policy of preserving for public use America's heritage of historic districts, sites, buildings, structures and objects; to facilitate public participation in the historic preservation movement and to serve that movement through educational and advisory programs; and to accept and administer for public benefit and use significant historic properties." The National Trust has fulfilled its purpose well: it supplies both members and non-members with "how to" information on a wide array of subjects and also offers other valuable services.

Membership in the National Trust (from $5.00-$500.00) entitles you to a number of benefits and privileges, including the outstanding monthly **Preservation** News and quarterly magazine **Historic Preservation.** Other benefits include discounts on merchandise at the Preservation Bookstore (whose catalogue of over 500 books provides a basic bibliography and source for information on historic preservation); professional counsel on preservation problems; and access to the National Trusts's preservation library, archives and collection of slide lectures. For information write to: National Trust for Historic Preservation, 740-748 Jackson Place N.W., Washington D.C. 20006. Regional Field Offices: Midwestern Regional Field Office, 1800 South Prairie Avenue, Chicago, IL 60616, and Western Regional Field Office, 802 Montgomery St., San Francisco, CA 94133.

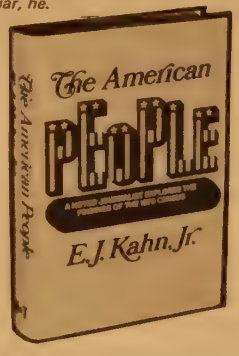
There is an excellent guide available to historic preservation on a more personal level. This is **Buying and Renovating a House in the City** by Deidre Stanforth and Martha Stamm, Alfred A Knopf, New York 1972, $4.95. This well-written book covers the entire range of problems and considerations in buying and renovating a city house. It deals with selecting the neighborhood and the specific house, how to get financing, problems of construction and renovation, legal problems, and a number of other areas. Included are a variety of meaningful case histories and an excellent section on the restoration histories of neighborhoods around the country. **A House in the City** is an invaluable how-to-do-it guide for the prospective buyer and provides new insights for those who simply want to learn more about the problems and potentials of historic preservation and renovation.

—Carol Pollock

The American People

Decenially the Census Bureau has produced a staggering array of statistical information which most citizens ignore because it is indecipherable; but which profoundly affects them because it determines such things as electoral districts and revenue sharing, among others. How pleasant to find a sensible and witty journalist who can lead us through the thorny thickets of masses of data. Some of what Mr. Kahn tells is widely known: American mobility, especially to the suburbs, the low place of black people and the extent of poverty in an opulent society. But some of his delightfully readable information came as a surprise to me: the population drift is no longer West, but South; birth rates no longer reproduce death losses; and 83% of the population were born in the U.S. of U.S. born parents. The inveterate collector of trivia will, of course, have a field day: there are six female blacksmiths working in steel mills, about 2,500 women over 55 have husbands under 25, and the category of computer specialist appeared for the first time in 1970, already 254,537 strong. Yet, Mr. Kahn attends to the really important data–– which he claims is at best only a poor mirror of the American people. His is a fascinating description, done with good sense, humanity and style. No liar, he.

—George Moore



The American People
(The Findings of the 1970 Census)
E.J. Kahn, Jr.
1973; 340pp.
$8.95 postpaid
from:
Weybright and Talley
750 Third Avenue
New York, NY 10017
or Whole Earth

Meanwhile, rural America has come to a bizarre pass. Were it considered an entity apart, its total acreage would make it the world's ninth biggest land mass. But in terms of income, with the country's unmatched wealth even more concentrated than its citizens, these hinterlands would at the same time be the world's sixth largest underdeveloped nation, backward in income, in housing, and in education, and outstanding only–– the plight of many urban residents notwithstanding–– in poverty.

•

The Fourth of December 1972 could turn out to be a milestone date for the United States–– a day as historic as the Fourth of July, the birthdate of any President, or the termination date of any war. For that was the day on which it was announced, somewhat to the Census Bureau's surprise, that American women had finally got around to bearing children at a rate below the critical figure of 2.11 per capita and had thus, for the time being at least, transformed their nation into one that had attained a Zero Population Growth rate.

If every man and woman produced exactly enough offspring to replace themselves, the Z.P.G. figure would, of course, be an even "2." The extra eleven-hundredths that statisticians have appended is supposed to allow for those unfortunate females who die before reaching child-bearing age and by so doing throw statistics involving reproduction out of kilter. Consequential as the 2.11 may be to demographers, the figure probably crosses the minds of no more than something like .00211 percent of the women who collectively determine whether or not a society exceeds it, falls below it, or, improbably, hits it right on the mark. On that December fourth, without any particular fanfare from the White House (which was then preoccupied with reducing the population of North Vietnam), American women were found to be having children at the rate of 2.08 apiece. (By March 1973 they were down to 2.03.) Even during the Depression, when there was a marked decline in the size of American families, the rate had never dipped below 2.2. As a result of the startling new low birth rate, the population of the United States increased during 1972 by only 0.7 percent.

[Don't be misled by these figures friends. At this rate, the population of USA will be double *what it is now by year 2000. According to what I've read recently, the US population increased by more than 2 million in 1973!]*

—JB

The Limits of the City

If exploitive agribusiness is what is wrong with the country something very similar is what is wrong with the equally essential city. (Our "Whole Earth" lauding of the rural life is urban to its toenails.) Ecological/political critic Bookchi here argues out the roots of what makes our cities negate themselves. "Design" has little to do with it all.

—SB

The Limits of the City
Murray Bookchin
1974; 147pp.
$2.75 postpaid
from:
Harper Colophon Books
Harper & Row Gen. Bks.
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Historically, the basis for a vital urban entity consisted not primarily of its design elements but of the nuclear relations between people that produced these elements. Human scal was more than a design on a drawing board; it emerged fro the intimate association provided by the clan, the guild, an the civic union of free, independent farmers and craftsmen. Knitted together at the base of a civic entity, people create a city that formally and structurally sheltered their most essential and meaningful social relations. If these relations were balanced and harmonious, so too were the design elements of the city. If, on the other hand, they were distorted and antagonistic, the design elements of the city revealed this in its monumentalism and extravagant growth. Hierarchical social relations produced hierarchical space; egalitarian relations, egalitarian space. Until city planning addresses itself to the need for a radical critique of the prevailing society and draws its design elements from a revolutionary transformation of existing social relations, it will remain mere ideology–– the servant of the very socie that is producing the urban crisis of our time.

Old Glory

Your town has origins. So does your family. This a splendid book about how to find and preserve an parade them. There is such a thing as cultural good ecology. Savor your own peculiar community's weirdness. Savor some other people's.

—SB

Old Glory
(A pictorial report on the Grass Roots History Movement and The First Hometown History Primer)
James Robertson, Ed.
1973; 191pp.
$4.95 postpaid
from:
Warner Paperback Library
75 Rockefeller Plaza
New York, NY 10019
or Whole Earth

Blakely, Georgia I Jus' Learn'd It

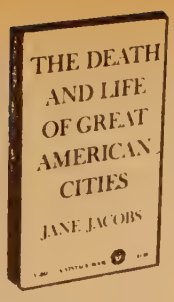
Canterbury, New Hampshire If It Weren't For One Believer *"Hands to Work and Hearts to God."*

What happens to a town when its one industry closes d Empty streets, creaking doors and wind whistling dow forgotten alleys? Not in Pocahontas. People there hav idea that may bring enough visitors into town to keep i alive. They're not doing anything new–– in fact, Hist Pocahontas, Inc., is doing everything old. They've disc that the town's most valuable natural resource just mig its gaudy coal mining past.

The Death and Life of Great American Cities
The Last Landscape

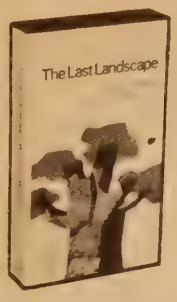
These are the two best books on land use planning I know about. Both writers became involved with the subject because of concern for particular places. Jane Jacobs was concerned to keep her neighborhood from being bulldozed away by the urban renewers. She learned enough about the subject to write this book, a classic, old but fortunately not out-of-date. Her books challenge the assumptions of most city planners. She understands that a city is a human ecology, and that city planning is a problem in self-government. She has written a later book, **The Economy of Cities**, *which is interesting but not as good as* **The Death and Life of Great American Cities**. *William H. Whyte does for suburbia and the countryside what Jane Jacobs does for the city. He was concerned about the desecration by developers of his native place, Chester County, Pennsylvania. Previously he had been a business writer and wrote* **The Organization Man**. *Now he is concerned with men in the landscape even more than men in organizations. Both he and Jane Jacobs provide tools for understanding land use on the level of the local planning commission where, like it or not, most land use decisions are being made.*

—Philip Ebersole



The Death and Life of Great American Cities
Jane Jacobs
1961; 448pp.
$1.95 postpaid
from:
Vintage Books, Inc.
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

The Last Landscape
William H. Whyte
1968; 402pp.
$2.50 postpaid
from:
Anchor Books
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth



To generate exuberant diversity in a city's streets and districts, four conditions are indispensable:

1. The district and indeed as many of its internal parts as possible must serve more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common.
2. Most blocks must be short; that is, streets and opportunities to turn corners must be frequent.
3. The district must mingle buildings that vary in age and condition, including a good proportion of old ones so that they vary in the economic yield they must produce. This mingling must be fairly close-grained.
4. There must be a sufficiently dense concentration of people for whatever purposes may be there. This includes dense concentration in the case of people who are there because of residence.

•

"I know how you feel," he said, "I often go down there myself just to walk around the streets and feel that wonderful, cheerful street life. Say, what you ought to do, you ought to come back and go down in the summer if you think it's fun now. You'd be crazy about it in summer. But of course we have to rebuild it eventually. We've got to get these people off the streets."

•

There is a quality even meaner than outright ugliness or disorder, and this meaner quality is the dishonest mask of pretended order, achieved by ignoring or supressing the real order that is struggling to exist and to be served.

•

How big, in functional terms, must an effective district be? I have given a functional definition of size: big enough to fight city hall, but not so big that street neighborhoods are unable to draw district attention and to count.

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Towns and suburbs, for instance, are the natural homes for huge supermarkets and for little else in the way of groceries, for standard movie houses and for little else in the way of theater. There are simply not enough people to support further variety, although there may be people (too few of them) who would draw upon it were it there. Cities, however, are the natural homes of supermarkets and standard movie houses *plus* delicatessens, Viennese bakeries, foreign groceries, art movies and so on, all of which can be found co-existing, the standard with the strange, the large with the small. Wherever lively and popular parts of cities are found, the small much outnumber the large. Like the small manufacturers, these small enterprises would not exist somewhere else, in the absence of cities. Without cities, they would not exist.

We don't have to wait for the grand design. It is there already. The structure of our metropolitan areas has long since been set by nature and man, by the rivers and hills, and the railroads and highways. Many options remain, and the great task of planning is not to come up with another structure, but to work with the strengths of the structure we have—— and to discern this structure as people experience it in their daily life.

•

What makes driving along back roads such a delight? It is more than the scenery; it is the tightness of scale. You go around abrupt curves, up sudden crests, under a canopy of overhanging foilage. Sometimes the view opens up to distant hills; sometimes it narrows down almost to a tunnel as you pass through woods. But always the edge of the landscape is close by—— stone fences, a line of maples, a barn—— so close by that we tarry where else we would speed.

This tightness of scale is what gets improved away. Curves are straightened, crests flattened, the trees and stone fences moved out of harm's way. The edge of the landscape gets moved back.

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In the late 30s, the landscape architect of the Texas Highway Department deliberately designed "visual bottlenecks" by periodically bringing the planting very close to the roadway. At such points the driver would instinctively ease up on the accelerator.

•

Where the water flows, the benefits of open space are the clearest. It will still be a tough job in the face of competing pressures, but along the drainage network we can invoke the maximum overlay of benefits, for the land is most necessary for flood control and the conservation of water resources tends to be the land that is most suitable for recreation and that is the most beautiful.

Tivoli, New York Every Little Detail Has To Be Right
"It is only by absolute refusal to accept the lures of the modern world that I have succeeded in re-capturing some of the serenity which the past has to offer."

Arlington, Massachusetts The Last Picture Frame — Almost
"My God, you know what you have to do when you save a mill? You have to run it!"

Weare, New Hampshire
Huntington Beach, California
Hoosick Falls, New York Telling It Like It Was
"The only reason why the 'Boston Tea Party' is better known than the Pine Tree Riot is because they had better press agents."

Knox County, Kentucky Fight Like Hell for the Living
"Hit's a sin to burn sass'frass wood. If'n you do, the devil will sit on the roof o' yer house."

Williamsville, New York The Rocking Chair Deserters
"The canvases all sparkle with the same vitality that you hear in the voices of long-time residents when they talk about the early days."

Prairie Island, Minnesota The Pipestone Carvers
"The great craftsmen of the ages have always taken time to pass along their special knowledge."

Wadesboro, North Carolina
Ysleta, Texas Singing the Ancient Songs
"Indians are coming toward an inter-tribal brotherhood, and an Indian from one tribe may learn another tribe's dialect so he can sing their songs."

Whitesburg, Kentucky The Appalachian Film Workshop

The Pioneer America Society
"Above the door hung the sign of the trade: a wooden replica of a muzzle-loader about eight feet long."

Every town should have at least one great old building to show off to visitors, and there certainly ought to be at least one amazing story that goes along with it.

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The Self Help History Test

Rate yourself. Score two points for every correct answer. One point for each answer partially correct. No fair cheating. Answers must come from memory. Above 38 points, excellent, Between 24 and 37 points, passable. Below 23 points, dismal, better get to work.

1. Where was your father born? (Town and state)
2. When was he born? (date and year)
3. Where was your mother born? (Town and state)
4. When was she born? (Date and year)
5. (Where and when was your father's father born? (State and year)
6. Where and when was your father's mother born? (State and year)
7. Where and when was your mother's father born? (State and year)
8. Where and when was your mother's mother born? (State and year)
9. What was the chief occupation of your father's father? Your father's mother?
10. What was the chief occupation of your mother's father? Your mother's mother?
11. What is the origin of your family name? Has it been changed?
12. What is the country of your father's family's origin?
13. What is the country of your mother's family's origin?
14. When did your family first come to this country?
15. Where did they land? (Port of entry)
16. Where did they settle? (Town and state)
17. Are there still relatives in that place?
18. Did your family migrate after arriving in this country?
19. How many states were home before the present one?
20. When was the town or city nearest you founded?
21. Who founded it and for what reason?
22. Were Indians living there? What nation or tribe?

SOURCE Catalog No. 2: Communities/Housing

Urban problems related to housing are at the heart of the decay of our cities: deteriorating residential neighborhoods, urban renewal rip-offs, unlivable public housing, denial of tenant rights, ghetto "redlining" by savings and loan companies, lack of housing for elderly and handicapped people—— a litany of the failure of our national and local housing policy. A wide range of organizations, programs and agencies are engaged in a struggle to reverse this accelerating slide of our cities into hopeless crisis. The Source Catalog *provides a comprehensive review of specific aspects of the housing system and of groups involved in each problem area: their goals, tactics, action projects, successes and failures. In each section, helpful books and journals, legal references, films, and other resources are discussed. The format and coverage of the catalog are excellent; it's an invaluable resource to anyone trying to organize, in a variety of positive ways, to rebuild our urban communities.*

—Doris Herrick

SOURCE Catalog No. 2: Communities/Housing
SOURCE, Inc.
1972; 255pp.
$2.95 postpaid
from:
The Swallow Press, Inc.
1139 S. Wabash Ave.
Chicago, IL 60605
or Whole Earth

What happens when the tenants stand up?

Squatting is a militant and highly illegal tactic that can be used by a tenant organization to dramatize a severe shortage of housing, to make people aware of the plight of poor tenants, to show how much "low rent" housing costs; to document the extent of abandonment in a community or to open up racially or class segregated housing. Squatting has been used in conjunction with a campaign for rent control when supporters camped out several weeks in the common of Lynn, MA. Squatting is a risky tactic, not only in terms of the tenant's safety, but also because the reaction of the power structure and the surrounding community cannot be accurately predicted. In any case, consider the situation carefully before you move.

Squatting is a very widespread phenomenon in other countries. Many of the large cities of Asia and Latin America contain hundreds of thousands of squatters. In Bogota, Colombia, for example, squatters have occupied whole city blocks which were once vacant, set up miniature cities almost overnight and stayed on the land for years, eventually getting their own sewers and running water, schools, etc. Manila, in the Phillipines, is estimated to have over a half million squatters, many living on piers out into the ocean.

•

The repair provision in HUD's grievance procedures obligates the housing authority to maintain your home in a decent, safe and sanitary condition according to the housing code requirements. When management doesn't respond to long-neglected repairs, you don't have to respond to the rent. This "rent abatement" is possible when:

1. There exists in your apartment a defect or defects hazardous to life, health and safety.
2. You request in writing repair of the defect or defects.
3. The housing authority, within 72 hours, neither repairs nor gives you a reasonable substitute apartment.
4. It was possible for the housing authority to make the repair or give you a substitute apartment.

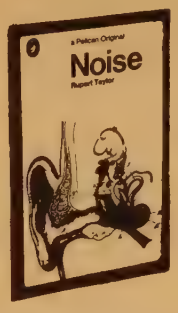
If the above four conditions are met you owe no rent, until the defect/defects hazardous to life, health, and safety are repaired.

•

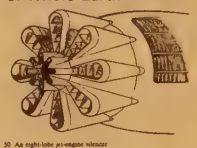
Noise

What makes noise and why; how our ears work; a lot of wonderful technical information about modern no problems and their solutions. Enough science to be used as a textbook on acoustics, enough art to read like a good *story.*

—DB
[Suggested by Craig Schenste



Noise
Rupert Taylor
1970; 268pp.
$1.85 postpaid
from:
Penguin Books, Inc.
7110 Ambassador Rd.
Baltimore, MD 21207
or Whole Earth



If the factory noise is a real humdinger and shutting windows and doors is not enough, the windows can be filled with glass bricks, and special doors of heavy construction with airtight seals may be necessary. This can bring great problems if there is a lot of traffic through the doors, althou partial relief can be had by acoustic screening of the door aperture instead. On top of this, workpeople may feel claustrophobic with closed-up windows even if the place is fully air-conditioned. In cases like these it is as well to think about reducing the noise at source.

If all else fails, as a last resort you can always stick your fingers in your ears. This may hamper your working capacit so fortunately there are ways of achieving the same thing while leaving the hands free to do other things.

Hammocks

I've given up my bed to sleep in a hammock. While away th afternoon dozing in a hammock that rocks you to sleep. Fuck in your Giant Yucatan Hammock. No backache because the most tension is where the most weight is: the trunk. And there are no worries about falling out. Imagine turning one of Frei Otto's Tensile Structures upside down a laying in it.

These are the people I dealt with. For sending an 8¢ stamp they return a brochure with prices, along with other junk they sell.

—Bruce Umbarger

from:
Hammock Living
1331 Columbus Ave.
San Francisco, CA 94133

CITY SURVIVAL

by Ned Cherry

Shortly before Epilog production time I wrote Ned Cherry, a friend who's lived in New York city for many years, asking his advice on city shelter. It didn't give him enough time to do a thorough survey, but he sent back the following information, which is, as Ned says: ". . . strongly NYC oriented but could probably be applied to any city with some adjustments."

—Lloyd Kahn

. . .Here's a random list that could assist people in fighting relocation, co-oping their own buildings, rehabilitating, etc.

1. **Tenant Action**—— Architects Renewal Committee in Harlem (ARCH) revised Jan. 73. "This handbook is intended especially for tenants & organizations of tenants in older & poorly maintained buildings where housing problems are a daily occurrence & conditions are often a serious threat to health and life." ($3.00 from ARCH 221 W 116 St, NYC 10026).

2. **Low Income Co-Op Conversions Handbook**, Dec. 73, NYC/ (Dept. of) Housing & Development Administration. Goes into economics and procedures of cooperative ownership including concept of "sweat equity" whereby tenants can contribute labor to project to reduce costs. (Free).

3. **The Tenant Survival Book** ($3.95 paper) Bobbs-Merrill/ NYC '72, by Emily Jane Goodman. How to organize in fighting the enemy: the real estate system. Very good book from NYC, where things are heaviest. —LK

4. **Super Tenant** ($2.95 paper) "NYC tenant handbook—— your legal rights & how to use them" by John M. Striker & Andrew O. Shapiro. Brownstone Books NYC/1973. Good tenants how to do it book/can be applied to any city bureaucracy.

5. **Neighborhood Preservation** (in New York City) NYC Planning Commission; Oct 1973. Good for historical development of tenements and laws that affected their chance. Also on need for rehabilitation of slum housing which is currently "the only game in town." (Free)

Cartoon by Boston Area Tenants Congress

6. **Remodeling Old Houses** (without destroying their character) Geo Stephen, Alfred Knopf/NYC 1972. Good information on rehabilitating anything from brownstones to tenements, and old wood frame houses as well. ($3.95) Paper.

7. **The Restoration Manual**, Orin M. Bullock, Jr. "A clear description of steps and procedures essential to authentic restoration of buildings of all kinds." Silvermine Publishers, Inc., Norwalk, CT 1966. Some good historical information. Nice drawings, good bibliography within. ($8.50 hardback; paper?).

8. **Residential Rehabilitation**, William W. Nash. McGraw, Hill, NYC 1959 (Hardbound $8.00). Good, but dated rehabilitation bibliography. Good early information, economics (subtitled "Private Profits and Public Purposes." Sort of presents the case for rehab back in '59. Too bad more people didn't read it then.

9. **Pratt Guide to Planning & Renewal for New Yorkers**, ($5.95 paper). By Ropert Alpern. NY Times Book Company (Quadrangle, copyright, Pratt Institute), 1973. Goes into programs available, housing, health, etc. Sort of defines programs as they are intended to work and then evaluates them in terms of "the reality" as to why they don't work. A lot of useful information for someone who wants to know why & how New York does & doesn't work.

10. **Design Workbook for Community Participation**, Resear Center for Urban & Environmental Planning, Princeton Uni 1969. (Not published but available from Xerox Corp.) Lot of useful information for incorporating community participation/activism into design processes. Focuses on housing/planning & design. Offers a method which allows community people to make decisions for effecting change in their physical environment.

10a. **Planning & Design Workbook for Community Participation– An Evaluation Survey.** Ibid 1973. Contains review of above which is huge (600 pages).

11. **Small Urban Spaces**, Ed. Whitney North Seymour, Jr. NYU Press, 1969. "The philosophy, design, sociology and politics of vest pocket parks and other small urban open spaces." Good stuff on community action for uses of vacan lots, adventure playgrounds in England, etc.

12. Possible future information from: Center for Cuban Studies (220 E. 23 St., NYC) on people returning from "Mini-brigades," Americans going to Cuba to assist in self-help housing programs, Russian pre-fab erections, etc. like Venceremos Brigades that went to pick/harvest sugar. Reports on recent brigades could be forthcoming. Have friend who just returned.

13. **Housing Quality Study**, published by Urban Design Council, '73 (51 Chambers St., NYC, free). Pretty good on new housing design.

Book for my course at Pratt which is excellent is United Nations publication entitled **Climate Control for Low Income Housing.** Good book on some indigenous solutions and attempts at basic education toward orientation of sun, wind. Paperback, $2.50 from U.N. Bookstore. . . .

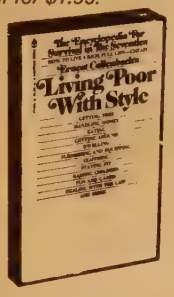
California Tenant's Handbook is a good guide for west coas tenants. By three attorneys. $3.95 postpaid from Nolo Press, PO Box 2147, Berkeley, CA 94702.

—LK

Living Poor With Style

Whatever else the Energy Crisis may mean, one thing is certain, prices of everything will continue to rise. When the economy is berserk the sane citizen will participate minimally. For city dwellers this is the best book on acquiring that skill. Living Poor and Living with Style are far from a contradiction in terms—— both consist of a loving (slightly detached) attention to detail. Here are 600 pages of intelligent detail for $1.95.

—SB



Living Poor With Style
Ernest Callenbach
1972; 600pp.
$1.95 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Low-cost paper napkins are about 20 cents for a package of eighty. (The only cheaper ones are restaurant packages of five hundred.) That means the cost per napkin is about 1/4 cent. If you have four people at table, that comes to about 1 cent per meal, 3 cents per day, 21 cents per week.

Now you're in a position to figure a comparative cost. If the cloth napkins last a year and cost 50 cents each, their average cost per week is about 1 cent each, or 4 cents per week for your family of four. The washing adds another 4 cents per week, so your total cloth-napkin costs are 8 cents per week.

Now you know why grandma, who isn't so dumb and doesn't have any spare cash to speak of, uses cloth napkins.

■

When you get your check, deposit it in the bank; but hold back enough cash to live on for the first week.

Pay your rent, utilities, telephone, car payments, and any other regular bills right away. If you're saving up, put that away too.

Divide up the money that's left, in the bank and in your pocket, into the number of days or weeks you have to go. The result is the number of dollars you have to spend each day or week. It will seem discouragingly small—— and remember this has to cover *everything*: food, car repairs and gas, clothes, medicines, bus fares, children's lunches, and so on. So try to spread these expenses out over the month as evenly as you can.

Buy your staple supplies (flour, sugar, rice, beans, spaghetti, dried milk, bread) in large quantities at the beginning of each week. That way you'll be sure to have enough food to get through the week if you need it. Buy less necessary or more perishable things like vegetables, meat, cheese, eggs, fruit, and clothes only after you've made sure you can last the week.

Never "borrow" from next week's money. If you're going to need something that can't be covered by your weekly amount, save up by scrimping *this* week, so you can buy it next week.

If you can be thrifty or lucky enough to come out at the end of a week with any money left over, you deserve to be able to spend it thoughtlessly—— buy some luxury you've been wanting, or just blow it! The middle-class mind tells you to carefully stash it away and get your fun out of counting it or something. That's not a very enticing sort of pleasure—— and besides, the time to do your saving is at the beginning of the month, when you put a little aside in a credit union or savings account.

•

Wool. More expensive than cotton, and usually woven in heavier fabrics, wool can be either in a plain or "worsted" form; the latter has more tightly twisted threads and wears much longer. Wool is also woven into loose-knit fabrics called jerseys, flannels, and cashmeres. Good woolen cloth is springy when you squash it and hard to wrinkle. Unfortunately, wool has to be either hand-washed or dry-cleaned—— hot water causes it to shrink drastically.

In new goods where the label says "virgin wool," that means it has never been used before. "Re-processed wool" has been used before, but not in clothes. "Re-used wool" is taken from clothes.

•

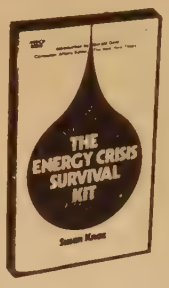
If movies are really your thing, and you are willing to put some effort into it, you can see better movies than are usually run at your local theater and see them cheaper. The key is organization: you have to organize some kind of movie club or film society. Collect a dozen or so friends who care about movies and want to join you; spend a couple of dollars on stationery blazoning you forth as the Akron and Krabb's Korners Whittling and Film Society. Then write away for the catalogs of 16-mm film distributors. Since 16-mm is the width of film used in schools, try to get free use of a school's projector. It's fine, of course, to have your own projector, but used ones in decent condition cost up to $200. (The old RCA-400 model is my favorite among used machines: it is gentle on film, has excellent sound, and stands up well under use.) Libraries and audiovisual supply houses also rent projectors for under $10—— which is still a lot.

The major distributors are: Contemporary/McGraw-Hill Films, 330 West Forty-second Street, New York, NY 10036; Audio Film Center, 34 South MacQuesten Parkway, Mt. Vernon, NY 10550; Museum of Modern Art, 11 West Fifty-third Street, New York, NY 10019; Films Inc., 425 North Michigan Avenue, Chicago, IL 60611. (All but the MMA have regional sub-offices.)

The Energy Crisis Survival Kit

A much better book than you'd expect. It's about living with urban scarcity—— higher fuel and electricity costs, blackouts, etc. The city-dweller will do well to prepare now for son of Energy Crisis, who will have bigger teeth than his late daddy.

—SB



The Energy Crisis Survival Kit
Susan Knox
1974; 224pp.
$1.65 postpaid
from:
Manor Books
329 Fifth Ave.
New York, NY 10016
or Whole Earth

You'll find more information about insulation in a number of publications. For starters, here are three:

Hidden Waste: Potentials for Energy Conservation, edited by David B. Large; available for $3 ($3.50 if you're billed) from the Conservation Foundation, 1717 Massachusetts Ave., Washington, D.C. 20036;

How to Insulate Your Home Yourself, available free from the National Mineral Wool Insulation Association, 211 East 51st Street, New York, N.Y. 10022;

The New York Times Complete Manual of Home Repair, by Bernard Gladstone, ($6.95), Quadrangle/The New York Times Book Co.

•

A Survival Checklist

Next, make a list of what you'll need to survive in a heatless, lightless, hot-waterless, refrigeratorless and freezerless world. A sample list follows:

Blankets and sleeping bags
Candles and candle holders
Can opener
Clock, manual
Cooking heat (sterno, candle warmer, alcohol burner, camp stove)
Fire extinguisher
First-aid kit
Flashlights and batteries
Gasoline siphon
Gloves
Kerosene lanterns
Matches
Message center
Newspapers
Pails
Radio, transistor
Razor, manual
Telephone numbers
Timer
Thermometers
Thermos bottles
Tools
Toothbrush and toothpaste
Wood or cannel coal or hibachi grill if you have a fireplace

Guide to Federal Consumer Services

Apparently some of that giant bureaucracy we hear so much about is actually intended to serve you, the person. This guide takes each department (Agriculture, Commerce, etc.) and tells its organization, purpose, functions, how to obtain service, publications available. Oriented to "consumer" services, but lots of other interesting tidbits.

—DB

Guide to Federal Consumer Services
Virginia H. Knauer, Director, Office of Consumer Affairs
1971; 151pp.
$1.75 postpaid
from:
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
or Whole Earth

Flood Insurance

HUD has established a program of flood insurance as a joint venture between the government and the private insurance industry. Insurance is available in eligible communities for one- to four-family residential properties and small business properties. In a flood-hazard area for which rating studies have been completed, the insured owner of an existing property will pay a subsidized rate and the government will pay the difference between that rate and the full premium rate. Limited coverage may be available without detailed rating studies for a 2-year period. Full premium rates apply to newly constructed or substantially improved properties in flood hazard areas and to all properties located outside areas of special hazard. Federal reinsurance against heavy losses is provided to the insurance industry. The program requires local governments to adopt and enforce measures to restrict the future development of lands that are exposed to flood hazards.

Applicant Eligibility: The county or community must establish eligibility before flood insurance can be offered in an area. Once eligibility is established, property owners may apply to be insured.

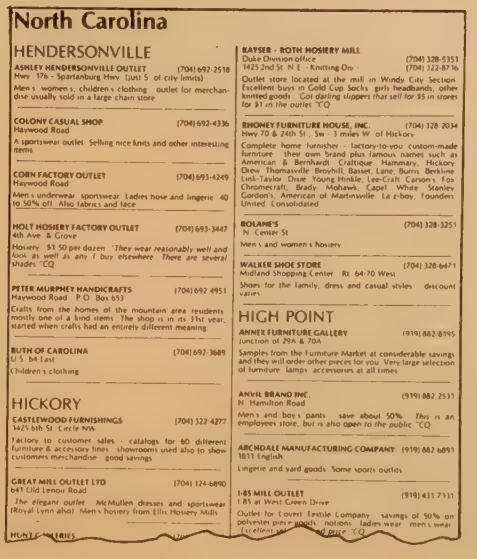
Additional Information is available from the Federal Insurance Administration, Department of Housing and Urban Development, Washington, DC 20410.

S.O.S.

Briefly annotated national directory, by area, of factory outlets—— cheap sources for mainly clothing, occasional furniture & housewares. Some 3,000 listings.

—DB
[Suggested by R. Oliver]

S.O.S.: Directory of Factory Outlet Stores in the Entire United States and Canada
Iris Ellis
1974; 200pp.
$4.95 postpaid
from:
S.O.S. Directory, Inc.
Box 96
Dearborn, MI 48121



North Carolina

HENDERSONVILLE

ASHLEY HENDERSONVILLE OUTLET (704) 692-2518
Hwy 176 - Spartanburg Hwy (just S of city limits)
Men's women's, children's clothing outlet for merchandise usually sold in a large chain store

COLONY CASUAL SHOP (704) 692-4336
Haywood Road
A sportswear outlet Selling nice knits and other interesting items

CORN FACTORY OUTLET (704) 693-4249
Haywood Road
Men's underwear sportswear Ladies hose and lingerie 40 to 50% off Also fabrics and lace

HOLT HOSIERY FACTORY OUTLET (704) 693-3447
4th Ave & Grove
Hosiery $1 50 per dozen *They wear reasonably well and look as well as any I buy elsewhere There are several shades* CQ

PETER MURPHEY HANDICRAFTS (704) 692 4951
Haywood Road P O Box 653
Crafts from the homes of the mountain area residents, mostly one of a kind items The shop is in its 31st year, started when crafts had an entirely different meaning

RUTH OF CAROLINA (704) 692-3689
U S 64 East
Children's clothing

HICKORY

CASTLEWOOD FURNISHINGS (704) 322 4277
1425 6th St Circle NW
Factory to customer sales - catalogs for 60 different furniture & accessory lines showrooms used also to show customers merchandise good savings

GREAT MILL OUTLET LTD (704) 324-6890
641 Old Lenoir Road
The elegant outlet McMullen dresses and sportswear (Royal Lynn also) Men's hosiery from Ellis Hosiery Mills

HUNT MILLS

RAYSER - ROTH HOSIERY MILL
Duke Dynnon office (704) 328-5351
1425 2nd St N E Knitting Div - (704) 322-8716
Outlet store located at the mill in Windy City Section Excellent buys in Gold Cup Socks girls headbands, other knitted goods Got darling slippers that sell for $5 in stores for $1 in the outlet CQ

BINONEY FURNITURE HOUSE, INC. (704) 328 7034
Hwy 70 & 24th St . Sw - 3 miles W of Hickory
Complete home furnisher - factory-to-you custom-made furniture their own brand plus famous names such as American & Bernhardt Craftique Hammary, Hickory Drew Thomasville Broyhill, Basset, Lane, Burris, Berkline Link-Taylor Dixie Young Hinkle, Lee-Craft Carson's Fox Chromecraft, Brady Mohawk, Capel White Stanley Gordon's, American of Martinsville La z-boy, Founders United Consolidated

BOLANE'S (704) 328-3251
N Center St
Men's and women's hosiery

WALKER SHOE STORE (704) 328-6471
Midland Shopping Center Rt 64-70 West
Shoes for the family, dress and casual styles discount varies

HIGH POINT

ANNEX FURNITURE GALLERY (919) 882-8395
Junction of 29A & 70A
Samples from the Furniture Market at considerable savings and they will order other pieces for you Very large selection of furniture lamps accessories at all times

ANVIL BRAND INC. (919) 882 2531
N Hamilton Road
Men's and boy's pants save about 50% This is an employees store, but is also open to the public CQ

ARCHDALE MANUFACTURING COMPANY (919) 882 6891
1811 English
Lingerie and yard goods Some sports outlets

I-85 MILL OUTLET (919) 431 7131
I 85 at West Green Drive
Outlet for Covert Textile Company savings of 50% on polyester piece goods notions ladies wear men's wear Excellent [illegible] price CQ

ETC.

ETC. is a monthly bulletin about consumer issues, useful for people who want to write letters and in other ways lobby for legislation and try to influence decision-making bodies at a state and national level. It includes information on legislative committee assignments and current status for legislation of interest to consumers. "How-to" tips are provided on evaluating available information and communicating effectively with legislators. Although at least half of ETC.'s information is oriented to California legislation, there is also national consumer legislation included, as well as source information for pamphlets and other literature useful to consumers anywhere in the country.

—Lorna Jones

ETC.
Barbara Erickson, Ed.
$5 /yr (students)
$8 /yr (individuals)
$15 /yr (businesses & organizations)
Monthly
from:
Barbara Erickson
7373 Willow Lake Way
Sacramento, CA 95831

An example of who provides some of your food products, take a look at this menu:

WINE (Bank of America)
LETTUCE SALAD (Dow Chem)
with TUNA? (Ralston-Purina)
ROLLS, courtesy of ITT
BAKED POTATOES (Boeing Aircraft)
with STEAK (Greyhound)
PUDDING (R.J. Reynolds)
(cigarettes too!)

COMMUNITY

COMMUNITY

Diet for a Small Planet

Everybody knows that beans are protein, nuts are protein, cheese is protein. Everybody knows that beans are inferior but better than nothing. Everybody can now finally make beans as good as steak, because somebody went beyond merely stating that some proteins are incomplete and painstakingly worked out how to complement them with other incomplete proteins to the better nourishment of us all. **Diet for a Small Planet**, *with an impressive number of charts, calculations, and equivalencies, unravels the mysteries of amino acid patterns and demonstrates how to combine vegetable proteins to obtain complete protein.* **Diet** *recipes avoid meat, but not dairy products, stay low on the food chain by using grains, legumes, and seeds in combinations and proportions that provide the greatest amount of usable complete protein. It's a comfort to have this book around.*

—Francine Randle

Diet for a Small Planet
Frances Moore Lappé
1971; 301pp.
$1.25 postpaid
from:
Friends of the Earth
Ballantine Books, Inc.
201 E. 50th St.
New York, NY 10022
or Whole Earth

Fully *one-half* of the harvested agricultural land in the U.S. is planted with feed crops. We feed 78 percent of all our grain to animals. This is the largest percentage of any country in the world. In Russia, 28 percent of grains are fed to animals, while in developing countries, the percentage ranges from 10 to 0.

Converted into protein these statistics mean that in 1968 livestock (minus dairy cows) were fed *20 million tons of protein primarily from sources that could be eaten directly by man.* Cattle and hogs alone accounted for one-half of the total protein consumed. This figure is minimal in that it excludes protein from alfalfa, hay, and low-grade by-product feeds. It *does* include the protein from most of our domestically used grains, specifically: 89 percent of our corn crop, 98 percent of our grain sorghum crop, 87 percent of our oat crop, 64 percent of our barley crop, as well as 95 percent of our unexported soybean crop, and a significant portion of the wheat and rye harvest. In addition, this 20 million tons of protein include about 950,000 tons of fish products fed to American livestock in 1968.

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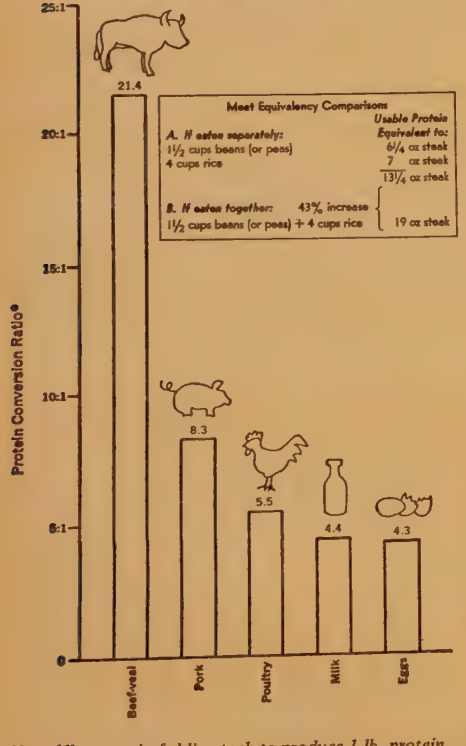
CHART I
LIVESTOCK PROTEIN CONVERSION EFFICIENCY

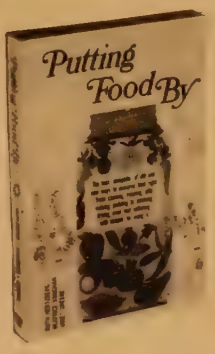


No. of lbs. protein fed livestock to produce 1 lb. protein for human consumption.

Putting Food By

Even a tiny garden can grow more than one family can immediately use. **Putting Food By** *is 360 pages of readable instructions on drying, freezing, canning, smoking and root cellar storage. The book is laid out with frequent topic headings and charts, making it handy for quick reference. Freezing is by far the easiest method, and feasible for nearly every type of food, even eggs. Sun-drying is ideal for fruit, except where it's humid; so there are instructions for making an indoor box dryer. With nearly two-thirds of every food dollar going to processing and marketing, it is easy to see that home processing saves money. This book, with suggestions on freezing TV dinners from leftovers and storing pre-cooked meals, even shows how it can save time.* *(See also article Pg.* **596***).*

—Rosemary Menninger

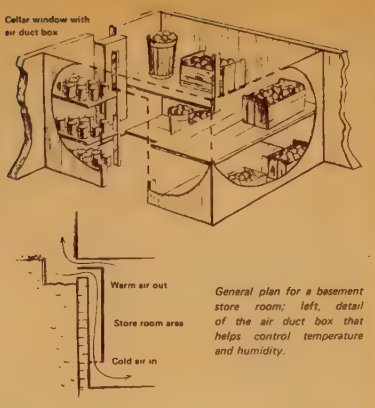


Putting Food By
Ruth Hertzberg,
Beatrice Vaughan, &
Janet Greene
1973; 360pp.
$4.95 postpaid
from:
The Stephen Greene Press
Brattleboro, VT 05301
or Whole Earth

The beauty of root-cellaring is that it deals only with whole vegetables and fruits and there are no hidden dangers; if it doesn't work, we know by looking and touching and smelling that the stuff has spoiled, and we don't eat it.

On the other hand it's something that sounds a lot more feasible than it may really turn out to be.

First, the householder must learn something about the idiosyncrasies of the fruits and vegetables he plans to store on a fairly large scale: for example, apples and potatoes—— the most popular things to carry over through winter—— can't be stored near each other, and the odor of turnips and cabbages in the basement can penetrate up into the living quarters, and squashes want to be warmer than carrots do.



General plan for a basement store room; left, detail of the air duct box that helps control temperature and humidity.

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Room Drying

By this method food is hung in a warm room—— the kitchen or the attic—— for the days required to dry the material. Old-timers would suspend racks of drying food above the big wood-burning range, finish off a flitch of beef near by, and festoon strings of apple or pumpkin rings near the ceiling. Herbs are still usually dried in attics or the kitchens of country houses, hung either in the open or in paper bags to protect them from dust.

In extremely dry areas it may be feasible to stack-dry certain fruits and vegetables indoors, following enough time in sun or dryer to get them better than halfway along. Stack the trays with 6 inches of space between them, open windows to allow a free circulation of air, and force a draft across the trays with an electric fan. Shift the trays end for end occasionally and turn the food to ensure even drying.

Nutrition Scoreboard

This book is a consumer's guide to the food market. Jacobson, a nutritionist with a Ph.D., has devised a rating system to cover the most widely available types of foods from meat and beans to trashfood snacks like Hunt's Snack Pack Puddings. Foods receive credit for important nutrients like protein, unsaturated fats, naturally-occurring sugar, and certain vitamins and minerals and lose credit for potentially harmful ingredients like added sugar, high fat content and saturated fats.

So, among protein foods, two ounces of beef liver earns 172 points for its good quality protein and its vitamins; among desserts Hunt's Snack Pack Pudding rates a minus 20 for its high sugar and fat content.

The recommended daily score is 1,000 and I was surprised at some of the foods that'll get you there. For instance, cantaloupe sits at the top of the fruit chart with a 99 while that old standard, the apple, rates only a lowly 12.

But Jacobson rates more than foods and that's what makes this book exciting. He also rates the food makers. Since most of the foods available today are "manufactured" by processors, packers and agribusiness farming it's important to understand who makes them and how they're made. There's over $160 billion a year spent on foods and most of those foods are made to be sold, not to nourish. Hunt's Snack Pack is an unfortunately good example of the make-it-to-sell ethic directed towards the children's market. There's nothing good in it—— it's all sugar and fat and artificial flavor. But it sells, and that is all that counts. The Food and Drug Administration is holding hands with industry so they're not about to slap wrists. Jacobson goes into it—— brand names and all.

—Jan Arrowsmith

Nutrition Scoreboard
(Your Guide to Better Eating)
Michael Jacobson, Ph.D.
1973; 102pp.
$2.50 postpaid
from:
Center for Science in the Public Interest
1779 Church St. N.W.
Washington, D.C. 20036
or Whole Earth

One Bowl

This little "weight control" book is about eating, not dieting. Get in touch with what and how you eat and the way it feels to your body; you'll eat what's good for you and in a quantity appropriate for your own metabolism. In fifty-four pages of simple, clear prose, Don Gerrard offers concepts and practices to eliminate distractions from our eating and make it meaningful. There's not a word devoted to magic lists of foods to avoid or panacea substitutes. And the daily moment-of-truth on the bathroom scales is abandoned since it focuses on external rather than internal feedback.

Similarly, the reviewer's rave personal testimonial has no place here; you have to find your own balance point, and this book should help. One more thought. As the strain on the world food supply increases, all of us (even those whose bodies don't reflect a "weight problem") would profit by adopting the respect and reverence for eating and food to which One Bowl guides us.

—Andrew Fluegelman

One Bowl
Don Gerrard
1974; 54 pp.
$1.45 postpaid
from:
Random House
Bookworks
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Try to make yourself comfortable eating this way—— from your bowl, in courses—— before you move on to develop this diet concept further. For example, it takes time to figure out how to eat a breakfast of cereal, eggs, sausage and toast all from a bowl. It takes time for it to feel okay to eat foods one at a time. It also takes more time to do the eating. You will be surprised, however, just how satisfying this can be. After a meal, each food will linger more distinctly in your memory, and eating will have been a series of gifts, linked together by your bowl.

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The next development in this concept is to begin eating alone. Maintain your same diet of foods as before, eating from your bowl, in courses. But now begin eating alone. Pick a favorite room or area of your living space and go there alone with your bowl. Make yourself comfortable in all the ways you know you like, and eat. Once you think about it, you might choose to eat in bed, or on your back porch, or in a corner of the living room. Help yourself. You need not always eat in the same place, but do always eat in a place you like.

The Food Conspiracy Cookbook

Lois Wickstrom has lived through all the trial and error involved in starting a food conspiracy, and she puts it down in plain language for others to learn by. For those who are interested in starting their own, or those who just want to know how they operate. It's not a hippie, oh-wow, pie-in-the-sky book at all. It has workable ideas, good do's and don'ts, a step-by-step guide for starting your own, and an interesting history of the Berkeley conspiracies. The recipes make my mouth water, and the illustrations are the finest I've ever seen in a cookbook.

-Evelyn Eldridge

The Food Conspiracy Cookbook
Lois Wickstrom
1974; 144pp.
$2.50 postpaid
(while they last)
from:
Sproing Books
1150 St. Paul St.
Denver, CO 80206

or

$3.95 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

All you really need to start is five families, one large car, truck or van, a money can and an accurate scale. (A used baby scale, which can be picked up at a hospital or junk shop for $5 or less, is good.) A place to post notices is useful, too. You and your fellow members will need to trust each other to spend money wisely and not to lose it. At first if the group is small, it is not necessary to have a bookkeeper. Just trust that everyone will put the right amount in the money can. There isn't a conspiracy we know of that folded due to mistakes made at the money can. It is also a good idea not to have over 50 families in one conspiracy. If yours gets that big, it is time to split into two or more groups.

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Getting Organized

First choose a member to call around the local dairies and cheese specialty shops. (You'll find them listed in the yellow pages under "dairy" and "cheese.") The caller should:

Explain what your conspiracy is doing.

Ask for prices on your conspirators' favorite cheeses.

Ask for a printed price list of the business's entire stock.

Ask if the business will deliver the cheeses, and if so, is there a fee for the service.

Find out how big the blocks of each cheese are and if the business will sell you parts of them.

Ask if there is a discount for paying in cash.

After you have all this information, choose one supplier. This one may not be the cheapest of those who were willing to sell to you, but the lowest prices in the world aren't worth dealing with unpleasant people every week.

The Supermarket Handbook

This book proposes to help shoppers find foods that are as natural and as unprocessed as possible. While not really a "supermarket handbook," its aims for its readers are worthy: to shop for and prepare foods close to their natural state, with an eye to nutrition and ecology.

Most of the information is well researched with short chapters on milk, fish, pasta, drinks, etc. Included are recipes for making your own baby food, salad dressing, "shake & bake," and soups. There are very important concerns expressed, such as the use of hormones and antibiotics in animal feed. The reader should not take the book as "gospel," though, for there are some misleading statements, i.e., that honey and apple juice are especially nutritious foods, whereas actually they provide little besides calories, even in their most natural state. The authors also say that canning destroys most of the vitamin C in canned orange juice—— but this just isn't so.

Nevertheless, the book has many positive suggestions, and encourages a general acceptance of foods close to the way they came into the world.

—Betsy Wood

The Supermarket Handbook
Nikki and David Goldbeck
1973; 413 pp.
$7.95 postpaid
from:
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Pepperidge Farm also uses only unbleached and whole wheat flours in their bread, and while in general their products are made with wholesome, natural ingredients, with the exception of the Corn and Molasses Bread, the Sprouted Wheat Bread, and Sprouted Rye Bread all their breads contain preservatives. The *Pepperidge Farm* Sprouted Wheat and Rye breads, by the way, list all the ingredients on the front label (they are considered "specialty" breads and are thus required to do so) and it's quite an impressive list at that: no refined flour, no refined sugar, and no chemicals. They taste absolutely delicious.

The *Oroweat Baking Company* is another outfit that offers several breads that are worth recognition, like their Whole Wheat, Wheatberry, Sprouted Wheat, Old Style Country, Bohemian Pumpernickel, Russian and Swedish Rye Breads. However, their Oatmeal, Protein Diet, and Wheat Nuggets Breads contain calcium propionate.

10

AN EVENING WITH TV CHING

The season progresses. Thousands of blankets with families and friends are now sprawled on the field watching *TV Ching* and the sun setting pink and grey behind it.

On the gigantic screen, FBI agent Primo Columbian and CIA agent Notary Sojak are sitting on the twin toilets, talking to each other. Nailed to the wall behind them is a plaque that reads:

"Refresh my bowels
in the Lord."
—St. Paul, Philemon 1:20

Columbian: "Well, we have undercover children working the Pen Pal circuit now. My own kid is corresponding with a Black Panther kid to find out what their free breakfast program is really a front for."

Sojak: "Great. And we have counterfeit one-dollar bills flooding the country. The lines at banks and stores are moving like molasses, because it takes so much time to check 'em out. Not like your counterfeit twenty-dollar bills. This is much more equitable. Anybody can get stuck with singles. We'll see what happens when the wealth is spread around. Chaos, that's what."

There is a sudden knock on the door, followed by a female voice saying, "Hello in there?"

A duet: "Who's there?"

"My name is Innocence." She sticks her frizzied head in the door and continues. "I'm sorry to disturb you gentlemen, but are you aware that you're on *TV Ching*?"

"What?" says Columbian. "You mean this is the outhouse where all that stuff comes from?"

Sojak turns toward the one-way mirror and confides: "He's only kidding, folks. Always pretending to be dumb, that's his style, y'know. The truth is, of course we know we're being watched. Twice a day. But I for one am proud to say that only in America could your protectors afford to be so arrogant. And I know that goes for my partner, too— right, Columbian?"

"Huh? Oh, sure. Say, listen, Sojak, I've been workin' on that Haiku."

He reaches down to his pants, which are crumpled on the floor surrounding his shoes, takes a scrap of paper out of a pocket, and reads:

We stayed up all night
Discussing the sense
Of touch...
At sunrise we fucked.

"Now," muses Columbian, "I just gotta work out the line structure."

"C'mon, let's get outa here before you blow our cover," says Sojak, buckling his belt and practicing his laugh.

Innocence takes their place on the *TV Ching*.

"I liked it better with five syllables missing," she begins. "But seriously, I would just like to say a few words. Live your alternative. Thank you."

In the field there is scattered applause as Innocence departs and Tongue Fu enters.

"I am looking for my sister," he says, holding her photograph up to the one-way mirror. "Perhaps one of you has seen her."

Tongue Fu is replaced on *TV Ching* by a Cowboy in his sixties. He places toilet tissue on the seat before he permits his buttocks to come in contact with it.

"I understand that CRAP is an acronym for Coincidence Rationalization and Practice. Well, that sounds anti-religious to me. I'm here to tell you folks about the greatest coincidence that ever happened to me ...."

Flashiebackie:

The Cowboy in his forties is standing in front of a saloon.

A Yankee of the same age bracket is standing across the street in front of a general store.

Each has a holster on his hip.

They move clockwise, with all deliberate slowness, step by bowlegged step, until they are finally facing each other down the middle of the street.

The spectators lined up on both sides observe in silence.

An Indian removes a feather from the base of his braid.

The Yankee says to the Cowboy: "You are betraying The American Dream."

The Indian says: "The American Dream was a Nightmare," and tosses his feather high up into the air. Tension permeates the atmosphere. The feather drifts back and forth, lower and lower. An unidentified harmonica player does a bluesy version of *That Old Black Magic.*

When the feather finally touches the ground, both the Cowboy and the Yankee simultaneously reach for their guns and shoot all in the same motion.

The two bullets travel toward their respective targets, but meet instead, midway between the Cowboy and the Yankee, in a head-on collision. They explode into each other with such fury that they create, while suspended in mid-air, the most expensive coin in the world ....

"And it's still enshrined in the National Archives," says the old Cowboy, wiping away pieces of feces from his wrinkled tushy. "Strange. We wear our fake jewelry and keep our precious jewels in a safe. But you can never tell me that this incident was not personally ordained by the Almighty!"

When the Cowboy leaves, a young man with a new beard and shaggy hair takes his place.

"I'm a veteran," he says, "and I have some good news and some bad news. First, the good news: We can finally pull out our ground forces and end the war. The bad news is the reason why: Because, now that there's a new distribution set-up for our opium supply, we won't need all those returning G.I. cadavers any more"

Rosebud Zwalyimeh, watching *TV Ching* in the field, blurts out to herself, "I know who that is." She runs to catch him leaving the outhouse.

"I recognize you," she breathes heavily. "You're Officer Serpento. Remember me— Rosebud? I signed an affidavit in your lawyer's office that I gave you a ride when your motorcycle was stolen. What are you doing out of uniform?"

"Oh, well, I left the force so I could devote full time to organizing."

"But why do you allow them to continue circulating that phony Oriental ear story. There's no mystery. It belonged to you."

"You better forget about that. It was a stupid mistake. I should never have left it in my tool kit. But you've got to understand. That ear was like my credentials for infiltrating the Rotten Apples— that's a vigilante organization, consisting of one bad cop from every precinct— but I need a different image now. Don't look, but we're being watched by a couple of feds."

Rosebud looks anyway. Columbian waves at her. Sojak kicks him in the ankle.

"How d'you like my earring?" Serpento asks. "I even got myself pierced for the cause. You've got to trust me."

[Continued, page 603]

COMMUNITY

EAT CHEAP (A Saga)

by Francine Randle

Whatever doesn't cost much is cheap, like mushrooms and dandelion greens gathered for free, surplus fruit only if you have time enough to preserve; marrow bones from the butcher, squash from the vine that won't quit, milk from the faithful cow. But to eat cheap from the supermarket requires not only some cash out of pocket and consumer sophistication, but the time to cook it from scratch and the ingenuity to make the same ole cheapies appetizing. At least a speaking acquaintance with nutrition is essential to avoid the false economy of empty calories and achieve any diet's primal purpose: nourishment. An unprejudiced palate is helpful, too, when it comes to the nitty-gritty of dried milk and organ meats.

In the olden days before the government recognized the right to sustenance by issuing food stamps, eating was the only variable in our bare bones budget. When considering any extra, we calculated its cost in quarts of milk and pounds of hamburger. An extra so computed easily becomes a frivolity. I still remember our first package of cookies.

The Co-Op Low Cost Cookbook

Co-Op attacked the problem of economically obtaining sufficient protein by devoting its **Low Cost Cookbook** *solely to main dishes providing the equivalent of three ounces of cooked meat at a cost limit of 25 cents a serving. But wait. . . that was 1965, the first printing. Prices rise, and there is a comment in the 1973 edition that some of the meat recipes now cost up to 80 cents per serving*

Low Cost *set us back a couple of pounds of hamburger, but it was worth it; it brought chili rellenos and creamed mackerel into our lives. It's geared to feeding the hungry, there's merit in that.*

—Francine Randle

The Co-Op Low Cost Cookbook
Consumer's Cooperative of Berkeley, Inc.
1965, 1973; 78pp.
$1.24 postpaid
from:
Consumer's Cooperative of Berkeley, Inc.
4805 Central Ave.
Richmond, CA 94804
or Whole Earth

Creamed Mackerel

4 Tbsp. margarine
½ c. chopped celery
1 small onion, chopped
4 Tbsp. flour
salt and pepper
2 c. liquid (juice from mackerel can plus milk)
1 15-oz. can mackerel
Optional: 1 10-oz pkg. frozen peas

Serves 4. Preparation time: 15 min.

Melt margarine in skillet; saute celery and chopped onions slowly until soft. Blend in flour, salt, and pepper. Slowly add liquid. Cook until thickened, stirring constantly. Add chopped canned mackerel, bones removed. Heat thoroughly before serving. VARIATION: Add frozen peas at same time as mackerel and cook until thoroughly heated. Serve on whole wheat toast, pastry shells, boiled potatoes, rice, or egg noodles.

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Menudo

2 lbs. fresh beef tripe
1 no. 2½ can (29 oz.) yellow hominy
1 no. 303 can (16-17 oz.) enchilada sauce
chili powder to taste
salt to taste

Serves 8. Preparation time: 3½-4½ hrs.
Wash tripe and cut into 1-inch squares. Simmer in water to cover for 3-4 hrs., until tripe is tender and water is almost boiled away. Add hominy, enchilada sauce, and chili powder. Simmer for 30 mins., and serve (on a dinner plate, not soup bowl).

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Good Cheap Food

If a cassoulet with lentils and without duck is an insult to your culinary intelligence and you're prepared to put your money where your mouth is, go directly to **Good Cheap Food**, *where cassoulet requires the authentic ingredients and a day to prepare. Cheap? Well, it will feed ten, and some occasions are worth a duck and day. Good? mouth-watering.* **Good Cheap** *is the luxurious economy of saving for this year's trip abroad, of preparing with care and serving with style the humblest of beans.*

Definitely not up-against-the-wall poverty fare, but cosmopolitan, literate, and rich in gastronomical lore. Cooking from **Good Cheap** *becomes cuisine instead of making something to eat.*

—Francine Randle

Good Cheap Food
Mirian Ungerer
1973; 235pp.
$3.95 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

Baked Marrowbones

Marrowbones, as noted elsewhere, cost next to nothing and are richly flavored, very nutritious, and highly prized by those who know that looks aren't everything. (In French cooking, it is a great delicacy.) Marrow tasts like essence of beef, but it looks, undeniably, like fat. Despite this, its devotees are many and passionate. This recipe adapted from an old cookbook makes marrowbones an attractive dish by covering them with Yorkshire Pudding. This amount is intended as a light supper dish or late-night snack.

Preheat oven to 450° *Serves 3-4*

1½ lbs. small marrowbones, sawed into 1½-inch lengths. Arrange the marrowbones in a square cake tin, standing on their ends if possible. Put them in the hot oven for about 5 minutes, or until you see about an eight of an inch of fat swimming in the bottom of the pan. Have ready the following batter to pour over the hot marrowbones.

Yorkshire Pudding

2 eggs
1 cup milk
1 cup sifted flour
3/4 tsp. salt

Beat the eggs until very light, then beat in the milk with a rotary or an electric mixer. Gradually beat in the flour and salt, adding a third of the flour at a time, until the batter is very smooth. The texture will be thinner than you might expect if you have never made Yorkshire Pudding before. Pour it around and over the marrowbones; then return the hot pan to the oven and *bake at 450°* for 10 minutes. *Reduce the heat to 350°* and continue cooking another 15 or 20 minutes, until puffed and brown. Serve at once. Each person will need a small, narrow knife to push the marrow out of the bones and spread on the pudding.

Cream Rises

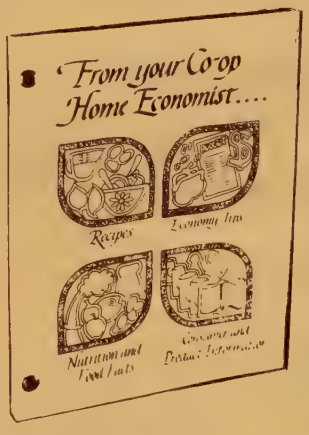
FOOD

Composition of Foods *Raw Data* 188
Diet for a Small Planet
Meatless, planetary protein 588
Putting Food By
Food storage (Also, Pg. 596) 588
Joy of Cooking
The Bible (hardcover recommended for lifetime use) 190
Fannie Farmer Cookbook
The bible 190
The New York Times Natural Foods Cookbook
Tastiest health food 591
The Vegetarian Epicure
Tastiest vegetables 591
How to Cook & Eat in Chinese
The very best Chinese cookbook 591
Tassajara Cooking
"For people who don't know whether to cook broccoli longer or shorter than cauliflower" 591

From Your Co-Op Home Economist. . . .

The pages that now make up **From Your Home Economist** *were free handouts at the Co-op. Most of them found their way with our groceries, were read, heeded, and lost in a filing system too random to access. Now collected, roughly categorized, but not indexed, these sheets expand on the theme of better eating through smarter shopping with nutrition information and a variety of recipes. Nothing very exotic here, just family style victuals, simple victuals, made with supermarket ingredients and simple cooking procedures, that help you do the best you can with what you've got.*

—Francine Randle



From Your Co-op Home Economist. . .
Consumer's Cooperative of Berkeley, Inc.
1970, 176pp.
$2.54 postpaid
from:
Consumer's Cooperative of Berkeley, Inc.
4805 Central Ave.
Richmond, CA 94804
or Whole Earth

Higher Protein Master Mix*

9 c. sifted enriched flour
2 c. nonfat dry milk powder
1 c. Soy flour
1 c. wheat germ
5½ T. baking powder
1½ T. salt
3 sticks margarine (3/4 lb.)

Sift together all dry ingredients except wheat germ. Stir in wheat germ. Cut in margarine with pastry blender or 2 sharp knives until shortening is in pieces the size of small peas. NOTE: This amount stores in two, 2 lb. coffee cans.

*The addition of dry milk, soy flour and wheat germ increases the protein, vitamin and mineral content of the mix. This may be especially desirable for vegetarians or for people who eat a lot of starchy foods such as biscuits, coffee cake and pancakes.

•

- A quart of nonfat milk made from the dry powder costs only 1/3 to 1/2 as much as a quart of fresh whole milk, depending on the size of package used. A family using 3 quarts of milk per day could save $185 a year by switching from whole to nonfat milk.
- Nonfat dry milk has all the protein, minerals, and the m important of the water soluble vitamins of fresh milk but only half the calories. In most brands, including Co- Label, fat soluble vitamins A and D have been added. Since many Americans struggle with overweight sooner or later, why not ease the pain by accustoming your palate to less rich foods, such as this in anticipation?

New York Times Natural Foods Cookbook

Whoopee and yumyum. . . the New York Times has come up with a cookbook of natural food fit to eat. It grinds no nutritional ax, adds no nutritional yeast, just presents wholesome recipes contributed by a wide range of cooks. For the most part, it even lets you choose your own level of natural. The thesis is only that food is at its most delicious and healthful when fresh, unrefined, and unprocessed. Desserts, baby food, preserves, even candy, are all here.

—Francine Randle

New York Times Natural Foods Cookbook
Jean Hewitt
1971; 434pp.
$3.95 postpaid
from:
Avon Books
250 West 55th St.
Order Dept., 8th flr.
New York, NY 10019
or Whole Earth

Natural Compote

½ lb. unsulphured pitted prunes
½ lb. monukka raisins
½ lb. dried pears
½ lb. unsulphured dried apples
½ lb. unsulphured dried apricots
½ lb. unsulphured dried peaches
Boiling spring water

Mix all the fruits together and pack loosely into a crock or glass jar. Pour boiling water over fruit to cover. Let stand uncovered 36 to 48 hrs. Fruit becomes puffy and soft and juice syrupy. Cover and refrigerate several hours before serving.

• Yield: Eight servings.

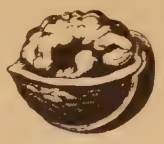
LOGAN BREAD

(This is a bread developed for numerous Canadian ascents on Mount Logan. A 2-by-2-inch square will sustain a man for a day, according to Malcolm "Tink" Taylor, Holderness, N.H.)

1 quart water
4 pounds whole wheat flour
1½ pounds raw sugar or brown sugar
12 ounces non-fat dry milk solids
2 tablespoons baking powder
2 tablespoons sea salt
2 cups honey
1 cup blackstrap molasses
1¾ cups oil
1 cup sesame seeds
1½ cups wheat germ

1. Preheat the oven to 300 degrees.
2. Mix all the ingredients together very well and turn into a greased roasting pan. Bake one hour. Cut into squares and then allow to air-dry until squares are semi-dry.

Yield: Enough to sustain two men 16 days.



How to Cook and Eat in Chinese

Chinese cookbooks always make me feel like I have two left hands, & cooking from them like I have four feet. Not this one. Ms. Chao makes it all simple, amusing, and delicious. Hundreds of recipes, every Chinese dish I've ever heard of, plus. Rant, rave. Health, variety, probably long life.

—DB

How to Cook and Eat in Chinese
Buwei Yang Chao
1945, 1972; 249pp.
$1.95 postpaid
from:
Vintage Books
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Sizzling. ——Sizzling is the act of throwing fried rice toast into hot clear soup. There are various forms of this. Usually, you make a clear soup with Szechwan *cha-ts'ai*, a tasty, slightly hot salted vegetable. Rice toast is the burned-bottom layer of rice which is formed by continued heating after the rice is done. (The burning of neglected rice at the *beginning* of boiling is a different affair and does not give such a good smell.) After the rice toast is dry after some hours, it is deep-fried and then sizzled into the soup at the table. In Chungking this dish has recently been named "Bomb Tokyo."

•

I am ashamed to have written this book. First, because I am a doctor and ought to be practicing instead of cooking. Secondly, because I didn't write the book. The way I didn't was like this. You know I speak little English and write less. So I cooked my dishes in Chinese, my daughter Rulan put my Chinese into English, and my husband, finding the English dull, put much of it back into Chinese again. Thus, when I call a dish "Mushrooms Stir Shrimps," Rulan says that that's not English and that it ought to be "Shrimps Fried with Mushrooms." But Yuen Ren argues that if Mr. Smith can Go to Town in a movie, why can't Mushrooms Stir Shrimps in a dish? So Mushrooms Stir Shrimps you shall have, or what have you?

•

Red-Smothered Chicken

One 3-4 lb. chicken (spring chicken)
2 cups water
1 scallion or 1 small onion
3-4 slices fresh ginger (if you can get it)
2 tb.-sp. soy sauce
2 t-sp. salt

Wash the chicken and chop into 16 pieces all together.

Put it in a pot with the 2 cups of water. Turn on big fire and cook until it boils. Then add the scallion, ginger, soy sauce, and salt. Turn to medium fire and cook for ½ hr.

Note that the red-smothering is shorter than red-cooking.

•

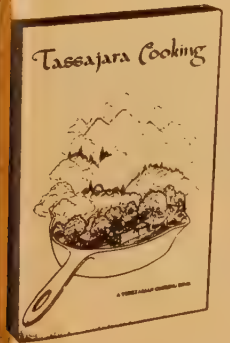
Red-in Snow (Salted Mustard Green)

Salted Mustard Green is so important you must learn to make it. Buy the kind without flowers. Wash, dry in air until no water shows. Cut into 2-inch sections. Rub with salt, kneading slightly, 1 tb-sp. to 1 lb. of green. Can in glass jars, driving out excess liquid and all bubbles. Stand in cool place for 2 weeks or until it turns yellow, when it will be ready to eat or go into many of the recipes calling for Red-in-Snow. Squeeze off brine lightly before use.

Tassajara Cooking

The Tassajara Bread Book *showed what else goes into outstanding bread besides flour. Now Ed Brown and the Tassajara Zen Center are back to show us the rest of the kitchen. These ascetic Bay Area Zennies continually smite my secularity with the best cooking I've ever eaten. Some asceticism. They cook a good cookbook too.*

—SB



Tassajara Cooking
Edward Espe Brown
1973; 242pp.
$3.95 postpaid
from:
Shambhala Publications, Inc.
1409 Fifth Street
Berkeley, CA 94710
or Whole Earth

About guiding the knife: Keep your right hand dumb. It's not going to cut cut cut, always guided by the last knuckle of the middle finger of the left hand. Either the left hand walks back along the vegetable, the knife following, moving over just as far as the retreating knuckle, or the left hand inches the vegetable forward, maintaining its own position.

•

Outline for Making Salads

Background Ingredients:
lettuce, cabbage, carrots, spinach, cucumber, cauliflower, broccoli, potatoes, sprouts, beets, tomatoes, green beans, asparagus, other?
beans: kidney, lentil, garbanzo, other?
grains: rice, bulgur wheat, other?

The ingredient upon which a particular salad is based is the "Background," which is how the salad gets its name, for instance, "Potato Salad."

Foreground Ingredients:
green, yellow or purple onions, celery, green peppers, red radishes, capers, dill or sweet pickles, olives, cheese, nuts, seeds, fruit and dried fruit

These are employed to complement each other and the basic ingredient, adding color, shape, taste, zest. The ingredients listed under "Background" could also be used in lesser amounts as "Foreground" ingredients.

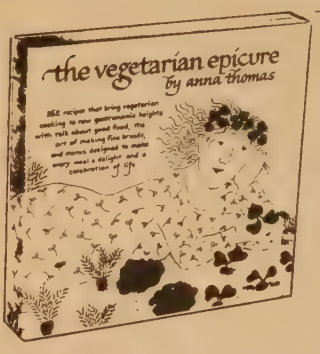
If a salad is kept fairly simple, say three or five ingredients, each ingredient can have some prominence, but it is also intriguing to "hide" ingredients in a salad. Consider how to cut each thing. How does it look? How well does it taste when bitten into? Can it be easily chewed? Does it need cooking?

Consider how to arrange the ingredients: Mixed together? Separate rows? Circles? Layers? Dressing in the middle surrounded by the salad ingredients? If each ingredient to be used is kept in a separate bowl, some of them may be arranged decoratively on top of the salad rather than being mixed in.

The Vegetarian Epicure

The pages of our copy of **The Vegetarian Epicure** *are spattered with sauces and memories, to my mind one of the best recommendations for a cookbook. It is used more than any other cookbook in our house of gourmet cooks and critical eaters. Anna Thomas has a delightful, innovative way with spices and herbs, and we have yet to cook an unsatisfactory dish from this cookbook (with the possible exception of parsleyed eggs—— they're green and weird looking). Her text is informative, informal, and easy to follow, with suggested menu plans, a discussion of handy and necessary tools, and basic instructions at the beginning of each chapter. The line drawings are delightful, and convey the spirit of the whole book: a sense of joy in both the preparation and eating of epicurean vegetarian meals.*

—Evelyn Eldridge



The Vegetarian Epicure
Anna Thomas
1972; 305pp.
$3.95 postpaid
from:
Vintage Books
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

People have approached me, puzzled, and asked how vegetarians eat. Their puzzlement is genuine. They try to imagine their own meals without meat and shudder. But when I imagine their meals I shudder too, because the standard American diet is so appalling in its lack of imagination. Even in finer cooking, the variety is largely limited to the preparation of the main course, almost without exception meat or fish. The menu is thus rigidly standardized. There is one important item: the entree. In a very secondary place, really playing the role of uninspired accompaniment to the meat, are such things as salad, vegetables, and bread. The standard menu is served with but little change from day to day or week to week, the "square" meal certainly is.

Vegetarian cookery is not a substitute for anything. It is a rich and various cuisine, full of many marvelous dishes with definite characteristics not in imitation of anything else—— certainly not in imitation of meat.

•

Beets in Citrus Sauce

1½ to 2 lb. very young beets
1¼ cups liquid from beets
1 lemon
1 Tbs. orange peel, freshly grated
2½ Tbs. sugar
½ tsp. salt
½ tsp. ground cloves
2 Tbs. frozen orange juice concentrate
1½ Tbs. cornstarch
1 Tbs. butter

Cook the beets whole until just tender. Drain, reserving liquid, peel and slice thin. (Or slice equivalent amount of canned beets.) Pour liquid from the beets (either from the can or the cooking water) into a pot, add the grated peel and the juice of 1 lemon, the grated orange peel, sugar, salt, cloves, and frozen orange juice concentrate. Dissolve the cornstarch in just enough water to make a smooth paste and add that also. Beat the mixture lightly with a whisk and cook until it becomes clear.

Add the sliced beets and the butter, heat it through, correct the seasoning, and serve very hot. Serves 6 to 8.

•

pizza rustica

This is not a pizza you're likely to find in this country: it is a hearty, 2-crust pie—an *Italian* pizza.

Basic Shortcrust Pastry for double-crust pie (page 285)
5 eggs
1 lb. Ricotta cheese
2 Tbs. chopped onion
1 cup grated Parmesan
chopped parsley, about 1 Tbs
salt and fresh-ground black pepper
2 Tbs. olive oil
2 cloves garlic
10 oz. tomato purée
4 oz. tomato paste
¼ tsp. dried marjoram
½ tsp. dried oregano
⅓ cup sliced ripe olives
½ lb. thinly sliced Mozzarella cheese
1 very large bell pepper

Prepare the shortcrust pastry as directed. It is especially good (for this pie) if you use only lemon juice and Marsala instead of water, to moisten it. Line a 10-inch pie dish and roll out a top crust.

Beat the eggs, stir in the Ricotta cheese, onion, parsley, Parmesan cheese, and season liberally with salt and pepper. Set aside.

Heat the olive oil in a small saucepan. Crush the cloves of garlic into it and add the herbs. When the garlic is clear and begins to turn gold, stir in the tomato purée, tomato paste, olives and, once again, season well with salt and black pepper.

Slice the Mozzarella thinly. Seed the green pepper and slice it into matchsticks.

Now you are ready to assemble: Spread half (or a little more) of the Ricotta mixture in the prepared pie shell. Arrange over it half the Mozzarella slices. Cover with half the tomato sauce, and spread half the green pepper over it. Repeat all the layers and cover with the top crust. Pinch the edges securely together and flute. With a very sharp knife, make 3 long, parallel slashes through the top crust.

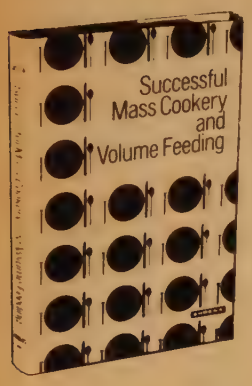
Bake the pie in a preheated, 425-degree oven for about 35 to 40 minutes or until it is well-browned. Let it stand for ½ hour before serving. Serves 6 to 8 generously.

COMMUNITY

Successful Mass Cookery and Volume Feeding

Both a textbook and a guide-cook-book, useful for anyone cooking in quantity. All recipes are for 50 people, but can easily be modified to fit the size of your commune. Basic information like how to take care of your equipment, how to make enormous sauces & soup stocks, & how full to fill a pot with vegetables. The conversion tables and glossary are especially useful for beginners.

—Evelyn Eldridge



Successful Mass Cookery and Volume Feeding
Matteo Casola
1969; 308pp.
$10.75 postpaid
from:
Ahrens Book Co., Inc.
50 Essex St.
Rochelle Park, NJ 07662
or Whole Earth

Cooking in Water: Meat is never boiled, but simmered at temperatures from 180°–210° F. Simmering is an excellent way to utilize trimmings and less tender cuts of meat. Stew is made of meat and vegetables simmered a long time. The vegetables are added last, with just enough time allowed for their cooking, which minimizes loss of nutritive value but still imparts flavor to the stew.

There are three methods of making stews. In the first method, the meat is browned before water is added, which gives the meat a roast flavor and the gravy a rich color. In the second, the meat is placed in simmering water. This method lacks the richer flavor of the browned meat, but the vegetables cooked with the stew will have more of a meat flavor. Or, third, the meat may be placed in cold water and brought to simmer. The broth in which the meat is cooked will have a rich flavor.

TABLE 3: SUBSTITUTING ONE CAN SIZE FOR ANOTHER

1 No. 10 can equals 7 No. 1 cans
1 No. 10 can equals 5 No. 2 cans
1 No. 10 can equals 4 No. 2½ cans
1 No. 10 can equals 3 No. 3 cans
1 No. 10 can equals 2 No. 5 cans

TABLE 4: AVERAGE WEIGHTS AND AMOUNTS OF VARIOUS CAN SIZES

Size of Can	*Average Net Weight*	*Approximate Amounts*
No. 1 Tall	1 pound	2 cups (1 pint)
No. 2	1 pound 4 ounces	2½ cups
No. 2½	1 pound 12 ounces	3½ cups
No. 5	3 pounds 8 ounces	1¾ cups
No. 10	6 pounds 10 ounces	3⅛ quarts

TABLE 12: FOOD BUYING GUIDE FOR BEVERAGES, CEREAL, AND DAIRY PRODUCTS

Group and Item	*Market Unit*	*Approximate Measure as Purchased*	*Approximate Number of Servings Cooked*
Beverage:			
Chocolate	8 ounces	8 squares	30
Cocoa	8 ounces	2 cups	50
Coffee	1 pound	5 cups	40-50
Instant coffee	2 ounces	1 cup	30
Lemonade	1 ounce	2 cups (juice)	16
Tea	1 pound	6-8 cups	300
Cereals:			
Bread	1 pound	12-15 slices	
Farina	1 pound	3 cups	33–(½ cup)
Hominy grits	1 pound	2½ cups	20–(½ cup)
Macaroni	1 pound	5 cups	22–(½ cup)
Noodles	1 pound	6 cups	18–(½ cup)
Rice	1 pound	2¼ cups	16–(½ cup)
Rolled oats	1 pound	5 cups	20–(½ cup)
Spaghetti	1 pound	5 cups	20–(½ cup)

Beard on Bread

Mr. Beard has been making both bread and cookbooks for close to fifty years. This is THE best bread book—clear directions for beginners, scores of recipes (all tested & seemingly foolproof) and variations for experimenters. He always tells you what to expect — in time, texture, flavor, smell.

—DB

Beard on Bread
James Beard
1973; 230pp
$7.95 postpaid
from:
Alfred A. Knopf, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Roll out the dough, and then roll it up into a sausage shape. Tuck the ends under and fit it, seam side down, in the buttered pan.

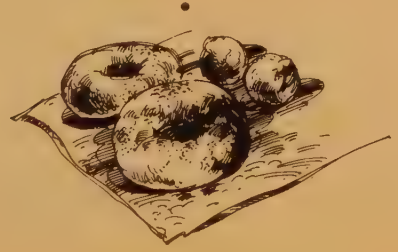
While I have used all-purpose flour extensively in testing recipes for this book, it is not the best flour to use for making breads. The choicest kind is the hard-wheat flour used by professional bakers, and if you have a cooperative bakery in your neighborhood you might ask if you can buy some. You can also buy hard-wheat flours from some health food stores or by mail order (see list of sources)— some made from North Dakota hard wheat, some from Texas hard-wheat. Any of them will make a beautiful, firm-crumbed bread, a bread that will elicit compliments from practically everyone who tastes it.

Jane Grigson's Walnut Bread from Southern Burgundy

This recipe comes from a delightful cookbook called **Good Things** by an English writer, Jane Grigson, who has a fine palate and the ability to evoke vivid pictures of food. It makes one of the most attractively flavored and textured breads I have eaten in a long time. If you can't find walnut oil, you can use a fruity olive oil. Baked in intriguing small, round loaves, it is light and has a pleasant crust, delicious "nose," and a delicate onion flavor. It's good with broiled or roasted meats, or with some cheeses, notably goat. (4 free-form loaves)

5 cups all-purpose flour (preferably unbleached)
1 tablespoon salt
2 tablespoons sugar
2 packages active dry yeast
2 cups warm milk
½ cup walnut oil or 8 tablespoons (1 stick) butter, melted but cool
½ cup walnuts, roughly chopped
3/4 cup onion, finely chopped

Sift flour, salt, and sugar into a warm bowl. Dissolve the yeast in ½ cup of warm milk, and pour it into the middle of the flour, together with the walnut oil (or butter) and the rest of the milk. Knead well until the dough is firm and blended into a smooth, springy ball (about 10 minutes). Leave in a warm place to rise for 2 hours (or in a cool place overnight). Punch down the dough, mix in the walnuts and onion, shape into four rounds, and leave on a greased baking tray to rise for 45 minutes. Bake at 400° for 45 minutes, or until the loaves sound hollow when tapped underneath.



FOODS BY MAIL

Two new sources for organic foods in bulk, by mail (in addition to those listed on Pg. **187 & 189***).*

Laurelbrook Foods
Box 47
Bel Air, MD 21014

Grains, granola, beans, seeds, soybean products, honey, lotions & soaps, fruits, and more. Most useful for commune & food conspiracies, as MINIMUM ORDER IS $150.00 Write for price lists.

The Infinity Food Co.
171 Duane St.
New York, NY 10013

Their own stone-milled organic flour; free catalog of all the usual basics, plus jellies, snacks, teas, homeopathic tissue salts, lots of other. Minimum order $50.00

Schapira Coffee Company
117 W. 10th St.
New York, NY 10011

Prices seem high— compare with McNulty's (Pg. **189***). They do offer green coffee beans for less, and encourage you to roast your own. Free catalog & recipe booklet.*

Sourdough

In the **Last Catalog** there is an address to buy starter for sourdough but here is a recipe I think would be easier & more practical.

Put 2 cups skin-temperature water into a wide-mouth 2-quart glass or plastic container, or a large bowl. Sprinkle with 1 package active dry yeast & stir with a wooden spoon until yeast is dissolved. Add 2 cups all-purpose flour (preferably unbleached) and beat until smooth. Cover, set aside away from drafts and let ferment 36 to 48 hours. Stir about 3 times a day. Mixture will work up bubbles & give off a yeasty aroma. Pour off 1½ cups to use in a sourdough recipe.

To store the rest, stir in equal parts warm water & flour in. About 2 cups of each. (Never add anything but flour & water to the starter) Let stand, lightly covered, in a warm place for 5 hours or until mixture bubbles. Then cover & store in a refrigerator or cool place. A small beanpot makes a good container. (Never use metal)

About 2 hours before making bread measure out 1½ cups of chilled starter into a bowl & allow to warm to room temp. before use. If it must be hurried place the bowl in a container of warm water. Watch closely, because it grows as it warms up.

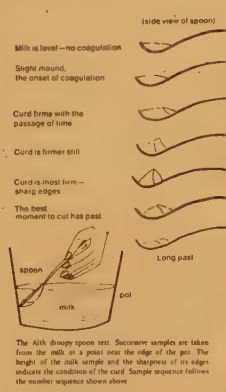
The older the starter gets the better it tastes. Although if it does not have regular use it will rebel & die. Ours is about 2 years old, we've had it since this recipe was published in **Woman's Day**. We make most of our own bread (6-8 loaves a week) and the starter has developed a mellow taste.

Love,
Lacy Mae
Meadville, PA

Making Your Own Cheese and Yogurt

Max Alth wrote this book for people who don't know anything about making cheese or yogurt. It covers lots of different kinds of cheese ranging from harder, more aged cheeses to the softer types. Lots of different recipes and information about cost of things used, & suggestions about where to get them.

—Shannon Slate



Making Your Own Cheese and Yogurt
Max Alth
1973; 226pp.
$5.95 postpaid
from:
Funk & Wagnalls
Shipping & Service Ctr
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

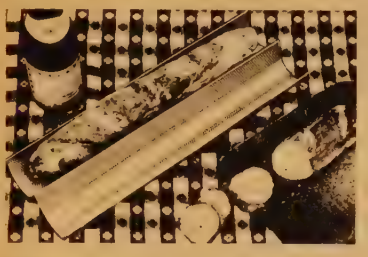
Paris Bread Pans

The pans come with the inventor's own recipe, which is simply the easiest, best & most authentic French baguette available from your kitchen. After numerous leaden, flat, sticky tries (including "the best one" from Julia Child/Simone Beck), I find the pans a joy and a bargain, especially considering the price of store boughten bread. Highly recommended for beginners.

—DB

Paris Bread Pans
$9.90 postpaid
/4 double pans
(8 loaves)

from:
Paris X
500 Independence Ave. SE
Washington, DC 20003



Jötul Cast Iron Waffle Iron

Less expensive than most electric irons this makes nice heart shaped waffles on a gas, electric or wood stove. Complete with heavy plastic handles for easy turning, so you can turn the iron over and cook both sides good for Sunday mornin' breakfast.

—Tom Gage

Jötul Cast Iron Waffle Iron
$20.00 postpaid

Manufactured by
Jötul
Postbox 6206
E.T. Oslo 6 Norway
from:
Whole Earth

Champion Juicer

Advertized as world's finest. We've used ours for four years and have found the claim to be true. Here's why:

A. Most juicers only juice, the Champion does all the following:

1. *Juices - vegetables (carrots, leafy greens) fruits - all kinds (with seeds & skins if desired)*
2. *Purees & homogenizes raw apple sauce - healthful baby foods - creamy nut butters - date butter, etc.*
3. *Grates - coconut, nuts, carrots*

Very special treats:

Homogenized frozen ripe bananas - result, delicious "banana delight", consistency of soft ice cream

Homogenized frozen orange sections - result, pure "orange sherbet"

Enjoy creating wholesome foods.

B. Most other juicers, being centrifugal, will only juice a limited amount of food at a time, then the pulp has to be cleaned out from the body. In the champion, one can juice indefinitely because of its unique structure. It has a horizontal shaft which is fed from above. The pulp is ejected out one end and the juice comes out down below through a fine screen. Easy to clean. An excellent kitchen tool.

We use ours at least once a day. Comes with recipe book. G.E. 1/3 HP capacitor type motor. 100% Dupont nylon & stainless steel. Colors. 5 year guarantee.

—Bruce & Hasmig Meyer
St. Maries, Idaho

Champion Juicer
$179.95
Brochure from:
W.R. Laboratories
639 E. Lockeford St.
Lodi, CA
95240

Wok

Two smaller woks are now available. If your family is small, buy a little one, as the 16" (Pg. 196) ones are unwieldy on a regular-size range.

—DB

Wok (with ring base and lid)

12" with wooden handle
$12.75 in the store
$14.00 postpaid

14" with
double metal handle
$13.75 in the store
$15.00 postpaid

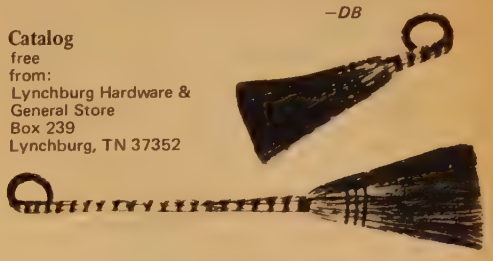
from:
Whole Earth

Lynchburg Hardware & General Store

Notable for some hand and family-made items—— quilts, dolls, brooms. Otherwise pretty, nostalgia-format, high-rent.

—DB

Catalog
free
from:
Lynchburg Hardware &
General Store
Box 239
Lynchburg, TN 37352



Green River Tobacco

How 'bout a pack of smokes for 14¢. All you have to do is spend 18 minutes rolling 'em. Green River will supply the rolling machine ($2.25), a tobacco blend of your choice (about $2.80 for two 7.5 oz. packages—— cost varies depending on your postal zone) which includes 200 cigarette papers, filters at 15¢ per 100, and even a handy plastic case (25¢) to put them in. But this is only a small sampling of the cigarette accessories they handle. Green River's tobacco comes in 9 different blends for cigarettes and many more than that for pipe tabac. They'll be glad to send samples of either type if you request it.

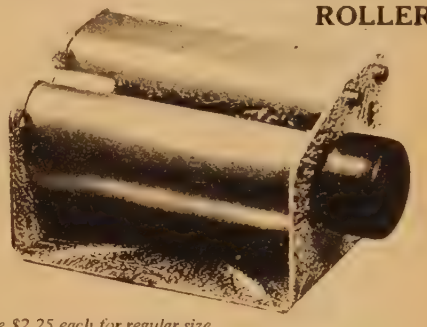
Pipe smokers who blend their own will find a variety of fine aromatic and non aromatic types in GR's inventory- -- St. James Perique, Syrian Latakia, Kentucky Burley, Cavendish, and so forth.

Very good and quick service, and low prices. Write for their illustrated price sheets.

—Al Perrin

Brochure
free
from:
Green River
Tobacco Co, Inc.
Box 1313
Owensboro, KY
42301

AJUSTA-BETTA CIGARETTE ROLLER



Price $2.25 each for regular size, King size $2.45, postpaid

COMMUNITY

GRINDER

The kids will be happy to turn the handle if you need both hands to hold the object you're grinding. A heavy, one-piece, iron gear case holds extra-long bearings and machine-cut, helical gear and pinion for a smooth, quiet, high-speed gear ratio. The tool rest is adjustable and the handle has an oversize wooden grip. This hand tool grinder comes with a 5"-diameter, general-purpose wheel . . . other wheels are available by special order. Shipping weight 5 lb. 10 oz.

HW-50 Hand Tool Grinder $8.00

FROE

Used for splitting shingles, staves and clapboards. The blade is struck with a short maul or froe-club to force it through the wooden block, cutting the wood into thin sections. Shipping weight 4 lb. 8 oz.

HW 49 Froe (blade only) $15.50
HW 49H Froe Handle. Shipping weight 10 oz. $1.68

SCYTHE

SCYTHE SNATH

The Back Saver snath is made from 60 inches of varnished second-growth northern ash with malleable iron fittings. The handles are attached by a bolt loop and may be moved to any position on or around the snath by turning them backward (clockwise) to loosen. Shipping weight 5 lb. 8 oz.

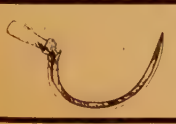
HW 3 Scythe Snath $10.70

SCYTHE BLADES

We offer three True Temper Briar edge blades. Each is heel grooved, half set and forge finished.

HW 4 Grass Blade (30 inches long) (shipping weight 2 lb. 6 oz.) $8.40
HW 5 Weed Blade (26 inches long) (shipping weight 2 lb. 8 oz.) $8.40
HW-6 Bush Blade (20 inches long) (shipping weight 2 lb. 10 oz.) $8.40

TRIMMER



This imported tool is made of Austrian steel, tempered and polished with a serrated 18-inch cutting edge. The handle is natural hardwood. Use it for trimming grass and small weeds around buildings and trees, or to cut hay in small amounts for your rabbits, chickens, etc. Shipping weight 3 lb.

HW 7 Austrian Grass Trimmer $2.10

Mother's General Store
$ .25
from:
Box 506
Flat Rock, NC 28731

Mother's General Store

One of the best catalogs I have ever found. I searched high & low to find a froe to make shingles for my log cabin they have one. Everything for the person who lives in the country & really likes to rough it: Franklin stoves, cast iron cookware, carbide lamps, candlemakers.

—Zack Rice
[Suggested by David Sowd]

HEMP RUG

Hand-woven at Happy Acres Studio by Robin Rye, one of the world's more creative people. The rug measures about 25½ x 42 inches plus fringe and is made of strong, serviceable, natural-color baling twine. The first sample we saw was still intact after 20 years of use! Orange and beige, heavy cotton warp threads in alternating grouds make an attractive striped pattern, and the ends are finished with hand knotted fringe. Shipping weight 2 lb. 8 oz.

RG-1 Baling-twine Rug $8.00

PEAR'S SOAP

This pure soap has been made since 1789 by Messrs. A. & F. Pears, Ltd. of London, England. Absolutely no foreign matter or coloring is added to this creamier. The clear amber cast of this transparent soap is acquired by aging. Gift packaged in boxes of three 2½-oz bar. Shipping weight 14 oz.

PS-1 Pears Soap (three bars) $1.85

SASSAFRAS SOAP

Concocted by a co-op in Wisconsin using an old family recipe, this homemade soap has a fresh sassafras scent, lathers well and is very mild. Comes in 4-ounce bars. Shipping weight 6 oz.

S-2 Sassafras Soap $.39

WASHBOARDS

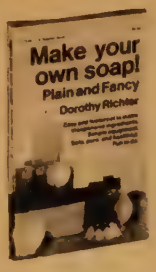
We have three pine-framed scrubbing boards by the Columbus Washboard Company. The Dubl Handi has a 7 by 8½-inch two-sided aluminum washing surface (pick your side according to the material to be cleaned . . . one's coarser than the other). The Maid-Rite has an 11 by 11-inch single-sided aluminum surface. Our best, the Crystal Cascade, has a single-sided glass scrubbing area that measures 11 inches by 12.

HS-8 Dubl Handi Washboard (shipping weight 3 lb. 8 oz.) $1.35
HS-9 Maid-Rite Washboard (shipping weight 2 lb. 10 oz.) $2.50
HS-10 Crystal Cascade Washboard (shipping weight 4 lb. 8 oz.) $3.35

Make Your Own Soap!

This book is the best buy: she gives positive advice including why something is done the way it is. Historical background, recipes, and information on scent, color & shape of soaps is given. She favors using materials at hand whenever possible, and includes sections on soap sculpture and imaginative ideas for gift containers.

—Lorna Jones



Make Your Own Soap!
Dorothy Richter
1974; 137pp.
$1.95 postpaid
from:
Dolphin Books
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Other References:

Batchelor, Walter, **Gateway to Survival is Storage**, Bookcraft Publishers, 75 cents, Section VIII, page 24 (one-page article).

Bramson, Ann Sela, **Soap. Making It, Using It, Enjoying It.** Workman Publishing Co., 1972, $2.45, 96pp.

Dickey, Esther, **Passport to Survival**, Bookcraft, 1969, 1973, $3.95, p. 135 (two-page article).

Notes on Soapmaking, Household Products Dept., Penwalt Corporation, Philadelphia, PA, free (six-page booklet).

Pitzer, Sara, **Making Your Own Soap**, in April, 1974 **Organic Gardening & Farming**, Emmaus, PA, pg. 90 (four-page article).

Causes of Imperfections and Variations in Soap

1. A greasy layer on top of soap indicates that too little lye was used for the amount of fat.
2. Streaked soap shows that the fat and lye solution were not thoroughly mixed.
3. Cracks in the soap may be due to too much stirring or too much free lye; or drying too quickly.
4. A white deposit on the soap may be due to the use of hard water in making the lye solution; a little free lye; or the addition of too much borax.
5. If too cold or too hot temperature is used, or if soap is too vigorously or not thoroughly mixed, a separation may occur. A separation may also result from using exceedingly rancid fat or fat containing salt. Greasy soap forms on top while liquid settles to the bottom.

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Castile soap gets its name from Castilla, the region in Spain where it was first produced. Olive oil was plentiful and when combined with tallow it produced a soap of superior quality. Though soap continues to be made in Spain it is seldom made of olive oil because of the cost.

Making Soap

Making your own soap is a highly satisfying, worthwhile endeavor. With a minimum of ingredients and gadgetry, a novice can produce relatively pure laundry soap that is non-pollutant and very effective. A further motive for soapmaking is the opportunity to recycle such household throwaways as bacon fat and milk cartons. . . plus the personal reward of creating an attractive, useful product for your daily life.

In this era of pollution awareness, relatively pure laundry soap should not be overlooked. It is easy to grind three-day old cakes using a Mouli Shredder (used to chop and shred vegetables). Neither books nor the short articles mentioned here address the energy issue, e.g. how much heat is used to render tallow. Nor was there a great deal of information about the fastest and safest way to accomplish the rendering.

—Lorna Jones

A very high-grade soap, which in many respects is superior to castile soap, can be made as follows:

¾ cup olive oil
1¼ cups tallow
¾ cup coconut oil

Glycerine Shampoo

½ cup of liquid glycerine soap poured into a bowl when the soap has been beaten to the pouring stage
½ cup of warm, soft water added to the soap
2 tablespoons of baby shampoo or use your favorite shampoo
2 tablespoons of coconut oil

Beat together until the ingredients are thoroughly mixed. The recipe makes about one pint of shampoo the consistency of cold cream.

If you have oily hair, add 1½ tablespoons of baking soda dissolved in 1 teaspoon of water.

Bon Ami Soap

Dear Editors:

Thirty years ago and earlier, before the "packaging revoluti filled the shelves of most American grocery stores, there wa a very popular, pure soap and feldspar cleaning cake around called Bon Ami. Probably just about everybody in the coun used it during the early 1900's.

With this single cake, a cloth, and a bucket of water, you could clean just about anything—— windows, mirrors, windshields, painted woodwork, bathtubs, sinks, pots and pans, eating utensils, or your body. First produced in New England in 1886, it has been in continuous production ever since. It simply was replaced on supermarket shelves by higher profit, higher packaged, faster-moving convenience cleaners.

A few years ago, Bon Ami was bought out by us—— Faultless Starch Company of Kansas City, Missouri. Our attempts to get the old red and yellow Bon Ami Cake packages back onto grocery shelves haven't been entirely successful because the buyers considered the cake old-fashioned.

But we live in a time, I believe, when many "old-fashioned" old reliable products are about to become New Products, a Products of the Future, as we delicately restructure our priorities, re-direct technology toward what's ecologically necessary and therefore beautiful, and redefine "progress" so that it's definition includes mankind's finite economical survival on this beautiful finite Whole Earth. And as President of Faultless, I have refused to drop Bon Ami Cak from our line because I believe it's too good a product to die, too much a product of the future, in the ecological sen It's ingredients, soap and feldspar, merely make elbow grea more efficient, and elbow grease doesn't pollute! And it's package is merely a paper label.

We have recently tried running a few small mail-order ads to find out whether or not people "out there on the other side of the supermarket" are still interested in Bon Ami Cake. The response has been beautiful.

If your readers are interested, and still can't find Bon Ami Cake at the grocery stores when they ask for it, we offer a half pound cake of Bon Ami at our cost plus postage and handling. It comes to $1.00, of which 48 cents is postage. That's not cheap, but it's still a good buy when you consid how much it will do and how long it will last.

Sincerely yours,
Gordon T. Beaham, III
President

Faultless Starch/Bon Ami Co.
1025 West 8th Street
Kansas City, MO
64101

Old Fashioned Recipe Book

It began in 1970, Carla Emery says, when she ". . .put together a table of contents—— pretty much the one you see in this book—— listing everything I thought 'back to the earthers' would need to know (whether I myself knew it or not). I thought a little and decided I could write it in about two or at the most three months." Four years, two children, a bigger farm, and many thoughts later, she had printed some 600 pages on the Living Room Mimeographer and fastened them together with snap rings. Thus emerged the **Old Fashioned Recipe Book**. *In it, Carla pretty much covers the essentials of homesteading, housewifery (and husbandry). Out of her experience she selects the practical and simple methods, leaves the science to the universities and the refinements to the idle. There's plenty to learn about living off your land before the esoteric details can be more enlightening than confusing. Carla begins at the beginning and sticks to the basics. Here & there she digresses into family anecdotes, mostly contemporary.*

Yet in **Old Fashioned**, *as in the kind of life it defines, lurks no nostalgia about the good old days. These recipes are for now for using what you have, and getting on with it. When the jelly doesn't set up you have pancake syrup. Count your blessings.*

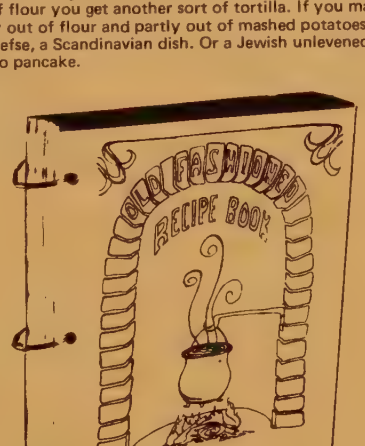
—Francine Randle

Don't buy land until you've landed a steady job within reasonable commuting distance. Less than 40 miles is what I used to say but since the price and availability of gas has become such a problem I'd say less than 20 now. Unless you're very certain you can make it with some other cash crop. Don't buy anything new if you can help it. List what you need and then watch and wait. You probably don't need all that anyway. Never buy on impulse. Buy only what's on your list. If you see something you like go home and think about it. If it was really that good you can put it on next month's list. Attend auctions, yard sales, go to second hand stores. If you can't find a bargain—— wait.

Buy out of season, that's fall for animals. Because everybody is trying to buy them in spring when the grass is bursting out all over but people don't want the expense of feeding and caring for them through winter. It's winter, too, for garden and farming equipment. In the summer shop for heaters and your winter fuel supply.

•

You can make a tortilla out of cornmeal by stirring one cup boiling water into one cup cornmeal. Then add salt and a couple teaspoons bacon grease and mix. Pat into thin cakes and bake on a griddle the same as for masa. If you make it out of flour you get another sort of tortilla. If you make it partly out of flour and partly out of mashed potatoes you'd have lefse, a Scandinavian dish. Or a Jewish unlevened potato pancake.



Old Fashioned Recipe Book
Carla Emery
1970; about 600pp.
$10.37 postpaid
from:
Carla Emery
Kendrick, ID 83537

•

Don't buy fruit trees mail order. The catalog salesmanship is great but in the long run I think you'll be happier with what you buy in person from a local nursery. The mail ord trees are cheaper. They are also smaller and in worse condi and get off to a much poorer start. Your local plant nurser knows expertly what trees are most suitable for your area. Their trees are already acclimated and if your tree should they will quite likely replace it for you at no charge if you ask. Buy the biggest (oldest) young trees you can afford. I takes them long enough to grow anyway.

•

If you want to can strawberries the university way pack th hot, cover with hot juice, and process 15 minutes. I freeze them. Imogene doesn't have a freezer so that's why she ca everything—— even things they say you can't. Personally though I like my fruits canned and my berries frozen from the taste and texture point of view. I just pick, bag, and freeze. No syrup or liquid at all. Same for any berry, not just strawberries. It saves work and mess too.

•

Any rabbit you don't want to keep for breeding should be butchered when it tips the scale at 2 pounds, to be a potential fryer. An old rabbit can be stewed like an old chicken. Young rabbits are distinguished by their soft ears and paws—— stiffness is a sign of age.

•

A quilt is a total of three ingredients. The stuff in the mid is wool, feathers, commercial bat, or old blankets. The easiest is the latter. When I have old blankets with holes o shrunk out of shape I make a quilt of them. The crazy to covers whatever is providing the real warmth and a botto layer is made of any material you prefer. I like flannel bec it's cozy in bed. (I'm an advocate of sheet blankets which are practically extinct except for Montgomery Wards—— they are so warm and nice if you're in a house that doesn' have any heat at night). Some people use cotton, sometim plain, sometimes a pretty print. I strongly advise against t commercial bat which is the "in" thing to use these days. It's not awfully warm and after about three washings it st to wad up and fall apart.

HOME WINEMAKING BOOKS

by Mike Palmer

When the spell of Prohibition was lifted from America slightly more than 40 years ago, only one adequate book on home winemaking (to my knowledge) was in general distribution: **American Wines and How to Make Them** by Philip M. Wagner (now out of print). Most wine "recipes" of that era were so vague or misleading that brewing of a drinkable concoction had to be the result of mere good fortune.

"The early mountain people made their wines by placing the fruit or berries in a crock or wooden cask and then letting nature take over the fermentation," explains Paul E. Mahan in one of the recent books on the subject, **Smoky Mountain Wines.** "Many of their wines would eventually sour and turn to vinegar, which accounts for their calling wine 'sour water.' "

Now, in our ecologically-aware age, there is no very good excuse for a comletely-spoiled wine except for carelessness on the part of the vintner.

Knowledge abounds. Wagner's work is as good a general guide to grape winemaking as any. But those who are passionate about freedom of selection can rejoice. An undeterminable but large number of books on making grape wine, strawberry wine, mango wine, day lily wine and even oat wine have riffled off publishers' presses in the last few years. Our wine library runneth over.

A perusal of eight contemporary books and pamphlets on winemaking and brewing indicates the authors are all reasonably well-acquainted with new equipment and procedures, including use of such additives as "pectinaze" and "vitaminized yeast nutrient." Inaccuracies detected have been minor. How, then, would one choose from among them? It might be a matter of whim (the thought of making "smoky Mountain wines" has a certain appeal). It could depend on whether you want to make wine solely from California-grown grapes or wish to experiment with such peasants of the vegetable kingdom as parsnips and potatoes. Some amateur vintners ask for no more than accurate directions, simply stated, while others will want to know of acids and esters and learn the tale of titration.

A capsule guide:

Making Mead by Bryan Acton and Peter Duncan. 1968; 80pp. $2.25pp. from: British Book Centre, Inc., 996 Lexington Ave., New York, NY 10021, or Whole Earth. Mead, or honey wine, needs special care and this is a comprehensive guide. It also covers such honey-based traditional English wines as metheglin, hippocras, melomel, pyment and cyser.

Step by Step Winemaking by Mary Carey. 1973; 64pp. $2.50 from Golden Press, Western Publishing Co., Inc. Box 700, Racine, WI 53404 or Whole Earth. Large format book with considerably more illustrations than most (many in color). Clearly written work adequately covering basics.

Home Brewing Simplified by Dean Jones. 1970; 33pp. $.95 from British Book Centre, Inc. 996 Lexington Ave., New York, NY 10021 or Whole Earth. Those who find American commercial beer insipid and can't afford imported brands should consider brewing at home. It's simpler than winemaking and this book will give you the fundamentals along with some elaborations. Incidentally, many brewmasters scorn the traditional American Blue Ribbon malt now that imported English malts are widely available. Make sure to check the legal aspects in your state.

Winemaking at Home by Homer Hardwick. 1954; 218pp. $1.95 from: Cornerstone Library, Simon & Schuster, Inc. One West 39th St., New York, NY 10018, Attn: Order Dept., or Whole Earth. Fairly comprehensive work by an Illinoan who has been making wine for nearly 40 years. Some 200 recipes, says the blurb. It could be a bit more up-to-date— for instance, use of Bentonite and Sparkalloid in fining is not discussed.

HOME WINEMAKING SUPPLIERS

by Mike Palmer

Most shops catering to the home winemaker carry a good range of supplies— yeast, concentrates, sodium bisulfite, pectic enzymes, etc. If there's an item of this sort not carried by your usual supplier, try Rockridge Laboratories.

There appears to be considerable variation among these firms in selection of equipment, such as crushers, presses and barrels. Some may carry only two or three small presses— very slow for those making wine in large batches— others will have several larger models as well. Should you want an item not listed in the catalogue, often a firm will be able to get it on special order.

I haven't seen every catalogue, but for those in the Northeast I know Vino Corporation has an excellent assortment: five different presses, three crusher styles, nine barrel sizes, and specialized equipment such as titration kits, a pH meter (for $155) and an optical saccharimeter ($60). For those in other parts of the country, Wine-Art has a nice selection (if you order heavy items from some firms, freight may be added onto the price, which obviously means you'll save money if the shipping point is near you). I'd also recommend The Compleat Winemaker in the Napa Valley.

These suppliers are in addition to those listed on Pg. **203**

Milan Laboratories
57 Spring St.
New York, NY 10012

Neshaminy Valley Vineyards
Box 371, Rte. 413
Buckingham, PA 18912
Grapes available.

Nichols Garden Nursery
1190 North Pacific Hwy.
Albany, OR 97312

Rockridge Laboratories
P.O. Box 2842
Rockridge Station
Oakland, CA 94618
Has Julius Fessler book and Fessler's "Oak-Mor" French white oak chips.

F.H. Steinbart Co.
526 S.E. Grand Ave.
Portland, OR 97214

Wine-Art of America, Inc.
4324 Geary Blvd.
San Francisco, CA 94118
Many outlets around the country.

The Wine Barrel
Arrowhead Farms
Box 421, Patuxent Road
Gambrills, MD 21054

Winecraft Winery
8363 Center Drive
La Mesa, CA 92041

The Winemaker's Shop
Bully Hill Road, R.D. 2
Hammondsport, NY 14840

Bacchanalia (new address)
273 Riverside Ave.
Westport, CT 06880

The Compleat Winemaker
1201 Main St.
St. Helena, CA 94574

Grapes available. Handles the excellent, Italian-made Sipi equipment, used by both the high-volume amateur winemaker and small commercial wineries. The Sipi stemmer-crusher is evidently the only hand-driven one sold in the U.S.

Continental Products
3716 No. Sherman Drive
Indianapolis, IN 46218

Jim's Home Beverage Supplies
2613 N. Division
Spokane, WA 99207

MAKE SAKE

by Cecily Murphy

In Japan, ritualistic sake drinking was a custom long before the tea ceremony was introduced. An important part of ancestral deity worship, it was one of the few Japanese customs that penetrated all classes— and the liquor was used medicinally as well as for pleasure or ceremony.

Today, sake costs about $3 a fifth in most liquor stores, but you can make it yourself for much less. Our best-tested recipe: Put three cups uncooked brown rice and four and a half cups sugar into a gallon jug with one package dry yeast and a handful of raisins. Fill with warm water, cover with a cloth. If you prefer a more festive approach, cap it with a balloon which will inflate as the sake ferments.

Set this concoction in a warm place for 10-21 days, and it's done (taste to check it). You can drink it plain or, following the customary method, heat it.

Reprinted from **San Francisco Bay Guardian**

Lowther Fruit Presses

Two high-quality fruit grinder-presses, plus kits & plans to make your own (for less). They look gorgeous & make cider & wine.

—DB

Model No. 1
$90.00
plus shipping

Model No. 2
(2/3 Press)
$65.00
plus shipping

Catalog free
from:
Natural Technology Design
Walcott, VT 05680

Wine Works

I would like to recommend that you list "The Wine Works" at 3024 De La Vina Street in Santa Barbara, California (93105) as an outstanding source for mail order wine and beer making supplies, materials and equipment. Not only do they carry unusual ingredients for making exotic and healthy wines such as Comfrey, Cranberry Powder, Rose Buds, Hungarian Chamomile and Linden Flowers and Leaves, but sell personalized linoleum blocks for you to print your own labels. They are prompt and dependable, and will give answers to your wine making problems if you write to them. I recommend them very highly!

Very truly yours,
Lee Burnett
South Bend, Indiana

Since ordinary metals will give wine an unpleasant taste, always use wood, plastic, or stainless steel implements to crush grapes— or just wade in and stomp on the grapes with your feet!

Smoky Mountain Wines and How to Make Them by Paul E. Mahan. 1973; 114pp. $5.95 from Arco Publishing Co., Inc., 219 Park Ave. South, New York, NY 10003 or Whole Earth. Not much on grapes, but advice on producing wine from a wide array of common and exotic fruit, berries, grains and vegetables.

Scientific Winemaking Made Easy by J.R. Mitchell. 1969; 246pp. $3.95 from British Book Centre, 996 Lexington Ave., New York, NY 10021 or Whole Earth. Many English books on winemaking neglect grapes because the vine is ill-suited to the British fen and moor. This lengthy work, for example, doesn't even mention use of the common grape crusher. However, it's quite detailed on the subject of fruit wines and should fascinate the would-be chemist. Includes considerable material on the composition of wines as well as instructions for basic lab procedures.

Wine-Making at Home by Bruce Palmer. 1972; 96pp. $2.45 from Workman Publishing Co., 231 East 51st. St., New York, NY 10022 or Whole Earth. Amusing, relatively accurate book presenting, primarily, the author's personal approach to making wine. There are other procedures than could be followed, but these methods should produce a palatable beverage. Contains presumably useful advice on obtaining vinifera grapes in metropolitan areas outside California.

Home Brewing and Wine-Making by W.H.T. Tayleur. 1973; 336pp. $2.45 from Penguin Books, 7110 Ambassador Rd., Baltimore, MD 21207 or Whole Earth. Another British book, more than adequate but, again, not recommended for its coverage of grape wines. This discusses the making of nearly every general type of wine imaginable, including mead, cider, fortified wines, sparkling wines, vermouth, sherry, etc. The beginning home winemaker may find reassurance in a chapter presenting the life stories of specific wines the author has vinified, including an allegedly excellent "jungle juice," useful also as an aphrodisiac or as furniture polish, known as "Cor!" It's customary in England, one learns, to drop a few peppercorns into a wine lacking in "character"! Cor!

Ken, Doris and Evan Herrick. This 2-week supply of canned food for four, bought at an Oakland market by the Herricks, cost about $75. By buying in caselots with friends, or by substituting more tuna for salmon and choosing least expensive dried fruits, you could lower the total price.

Setting Food By

BY DORIS HERRICK

Doris Herrick leads two lives. Every weekday but Tuesday she's Associate Director of Development at Mills College in Oakland. On Tuesday she crosses the Bay to become Whole Earth's leading researcher. As she strolled in to the office last week through 800,000 anchovies flipping out on the pier, she was heard to remark, "This certainly isn't Mills College."

I would like to see her article expanded into a book. Would readers who have some experience in food storage be interested in helping? Tips, experiences, photos, ideas-worth-trying, other published articles. Help liven Doris's Tuesdays.

—SB

WHY STORE FOOD?

The basic concept of food storage is similar to that of modern insurance or savings accounts. It isn't a new idea. As a strategy for securing the future, it predates the Biblical story of Joseph's advice to the Egyptian Pharoah to store food over seven plentiful years in preparation for seven years of famine. Only in very modern times have families not stocked their pantries and cellars with food supplies to carry them through lean seasons. In recent decades the necessity of keeping a food reserve has become an increasingly distant thought to most Americans. During the 20th century, crop production became more stable and improved technology increased yields to the point of surpluses. Burgeoning supermarket chains brought a cornucopia of foodstuffs within a few minutes' drive of most people. Furthermore, living out your life in one house or one town became more and more uncommon; the trend toward family mobility and toward smaller family units living in smaller quarters made the full pantry tradition— particularly for urban dwellers— a nostalgic memory. What has been happening to challenge this state of neglect?

Many of the common sense reasons for food storage remain the same as they've always been: the potential injury, illness or death of the family's breadwinner, or the possibility of a natural disaster like an earthquake, tornado, hurricane, flood or blizzard——almost every section of the United States is vulnerable to one or another of these phenomena. The possibility of atomic war, while not felt so intensely by most Americans as some years back, holds more threat as the nuclear club admits new members. Social and economic disturbances such as civil disorders, strikes or mass unemployment in a recession or depression, not experienced in a large-scale way by Americans since the 1930's, are prospects that seem less remote today.

Since these potential problems have not sufficiently motivated the vast majority of Americans to set food by, what else is new that might spur such action? It seems to me that there are several new elements on the scene which provide an extra incentive for thoughtful persons to consider storing food. First, food shortages, both international and national, are increasing. As a result of continued population growth, crop failures caused by adverse climate conditions, a world-wide increase in protein consumption, exhaustion of food-producing ecosystems, the energy crisis, and insufficient fertilizer supplies, world food reserves have been drastically reduced. Global grain stocks fell to only about 100 million metric tons in 1973, their lowest level in two decades. The world's population increased by half in that same two decades. As Lester Brown of the Overseas Development Council points out in the just-published report, "Agenda for Action 1974," although 100 million tons may seem a tremendous amount of grain, "it represents a mere 8 percent of annual world grain consumption, or less than one month's needs——an uncomfortably small working reserve and a perilously thin buffer against the vagaries of weather and plant diseases."

On the national scene, processed vegetables and fruits are expected to be in such short supply this summer that grocery stocks will range from reduced variety and sizes to bare shelves. Heavy demand was put on canned goods last year by American shoppers trying to stretch their food budgets. At the same time, farmers were deciding they could make more money planting wheat instead of potatoes and feed corn for pigs instead of sweet corn for people. A spokesman for the National Canners Association told the Wall Street Journal recently that the carryover supply of canned goods by summer's end "would amount to only a half-week's supply of processed fruit and at most 1½ weeks' supply of vegetables." Suppliers hav already begun to allocate some items to grocers, base on a percentage of what they bought last year.

A second new inducement to food storage is the unprecedented inflation that is confounding economists and squeezing the budgets of Americans at almost all economic levels. Between January, 197 and January, 1974, according to the Labor Department, retail food prices went up 19.5%. Cere and bakery products rose 28.7%; meats, poultry and fish went up 24.3%; dairy products, 22.8%; and frui and vegetables 14.7%. These increases occurred duri a year in which personal disposable income rose onl an average of 10.7%. The food crunch contributed t a decline in average spendable weekly earnings in real terms of 1.4% for people outside the agriculture business ("National Food Situation", U.S. Departme of Agriculture, February 1974).

The relatively bright picture in canned fruits and vegetables, as we have seen, is rapidly fading. When the processed products from this year's crops reach the supermarkets in August and September, record price rises are expected. The latest prediction is that jumps of from 20% to 40% will occur. (For example peach growers are offering the current crop at $140 a ton compared with last year's average of $97.) Price increases during 1974 for all retail foods have been predicted variously by the USDA at 8%, 15%, and most recently at 12%. We can only hope this forecast is nowhere near as far off as the USDA was in 1973 (the final figure was triple their prediction).

A final, and really influential impetus toward renewed concern for food storage, has to do with citizen perception of the state of the society. There is a new awareness of the fragility of the economic system, of its complexity and how little understandi there is of how it really works. Old solutions are not working, old models are being discarded, and there are great gaps in the data needed to develop new policies. Out of the great oil debacle, and the government's inability to deal with inflation, has come a massive loss of citizen confidence in the future of the economy. The latest poll of consumer expectations by the University of Michigan's survey center recorded the greatest pessimism in the center' 25-year history. Seventy-six percent of the respondents thought that the government will not be able to reduce inflation in the next couple of years. Furthermore, the psychological shock of the gasoline shortage will continue to reverberate for some time. The carry-over is clear: if it is indeed possible to drive up to a gas station and find no gas, then it is possible someday to drive up to a supermarket and find no food. Sources of supply an the distribution system are vulnerable to large-scale strikes, disruption of the transportation complex, energy cutbacks, failure to realize anticipated crops the vulnerability has been there some while. The difference is that now we know it.

Embarking on a well thought out plan of food storage should serve to alleviate some of this prophe doom and gloom. There are positive aspects to setting food by! Naturally, there is a feeling of self-reliance and security that comes from preparedness, as well as the ability to assist family or friends in the event of mutual emergency. There is also the potential for savings— the more food you buy now, the more you avoid inflationary price increases later You may, in addition, effect savings by quantity buying, either on your own or as part of a purchasi group.

How then to begin? How much food? What kind of food? Canned, dehydrated, freeze-dried, bulk? A what price? How packaged? Stored where? What about rotating foodstocks? What about water? One question leads to another and the complexities of th whole storage project intimidate and defeat many people before they start. For others, an impulsive beginning may be made that results in wasted food and general frustration. I believe that the best meth is to approach the goal in stages that are related to the length of the emergency you decide to prepare for.

The initial aim should be to prepare for a short term situation that might be brought on by natural disasters like earthquake or flood, or by a temporary breakdown of food/water distribution because of strikes or civil disorder. For this sort of contingency, the best storage plan would rely predominately on canned goods. The Defense Civil Preparedness Agency recommends maintaining a 2-week supply of foods which:

- require little or no water for preparation
- can be eaten without heating
- are packaged in one-meal sizes
- have a long shelf life
- require minimum storage space
- can be rotated in your home food supply
- your family likes.

Since there may be no electricity or gas available in your home for cooking or refrigeration, canned goods score because they can be consumed as is. Since water service may be interrupted, canned food is preferable in this short term situation to dehydrated food, because no additional water is required for preparation. Canned products come in a variety of sizes so that you can choose the size nearest one-meal capacity for your family, thus avoiding food wastage. On the negative side, canned goods have a shorter shelf life than dehydrated or freeze-dried foods, and require more space, but the other advantages outweigh this for your first-stage storage. Furthermore, the convenience and familiarity of canned foods in a panic situation is a decided plus.

Here is a list of canned goods for storage, appropriate for feeding a family of four (two adults and two children) for two weeks, suggested by Walter D. Batchelor in his useful booklet, "Gateway to Survival is Storage":

SURVIVAL KIT

Milk	
Powdered, 5 lbs.	
Evaporated, 8 cans	
Canned Fruit	
Pears	4 no. 3 cans
Peaches	4 no. 3 cans
Soups	
Cream soups	24 10½oz cans
Vegetable	24 10½oz cans
Consomme	16 10½oz cans
Bouillon cubes	24
Cereals	
Oatmeal, instant	2 pkgs.
Ready-to-eat	2 pkgs. individuals
Bread	
Bread or biscuits	12 cans
Miscellaneous	
Cookies	4 cans
Sugar, granul'd	2 lbs.
Salt	2 small cans
Hard candy	2 lbs.
Pickles	2 cans
Water	112 12oz. cans
Baked beans	4 cans
Spaghetti	2 cans
Cheese	2 16oz jars
Peanut butter	3 lbs.
Crackers	tin cans, 4 lbs.
Gum	24 pkgs.
Dried fruit	4 lbs.
Instant cocoa	2 pkgs.
Juices	
Tomato	4 no. 3 cans
Orange	6 no. 3 cans
Grapefruit	6 no. 3 cans
Vegetables	
Tomatoes	6 no. 2½ cans
Peas	8 no. 303 cans
Corn	6 no. 303 cans
Green beans	4 no. 2 cans
Canned Meats	
Beef hash	6 16oz cans
Beef stew	6 16oz cans
Salmon	2 16oz cans
Tuna fish	4 7oz cans

The shelf life of canned foods depends greatly on the temperatures at which they are stored, as well as on how long the product had been canned and stocked before you bought it. Some general suggestions have been provided by the Mormon General Church Welfare Committee:

> The short shelf life products are the highly acid and pigmented foods, such as grapefruit and orange juice, black and red cherries, all colored berries, prunes and plums. These canned foods generally have an average storage life of one or two years. Other fruits, such as peaches, pears, apricots and applesauce, should average from two to three years. Vegetables, such as beets, carrots, green beans, spinach, greens, tomatoes and tomato juice, should have an average storage life of from three to four years. Such vegetables and meats as peas, corn, lima beans and roast beef should have an average from four to five years.

On the other hand, the Office of Civil Defense handbook, "In Times of Emergency," carries the following table with much more conservative replacement periods:

	Months
Milk	
Evaporated	6
Nonfat dry or whole dry milk, in metal container	6
Canned meat, poultry, fish:	
Meat, poultry	18
Fish	12
Mixtures of meats, vegetables, cereal products	18
Condensed meat-and-vegetable soups	8
Fruits and vegetables:	
Berries and sour cherries, canned	6
Citrus fruit juices, canned	6
Other fruits and and fruit juices, canned	18
Dried fruit, in metal container	6
Tomatoes, sauerkraut, canned	6
Other vegetables, canned (including dry beans and dry peas)	18
Cereals & baked goods:	Months
Ready-to-eat cereals:	
In metal cont'r	12
In original paper package	1
Uncooked cereal (quick-cooking or instant):	
In metal cont'r	24
In original paper package	12
Hydrogenated (or antioxidant-treated) fats, vegetable oil	12
Sugars, sweets, nuts:	
Sugar...will keep indefinitely	
Hard candy, gum	18
Nuts, canned	12
Instant puddings	12
Miscellaneous:	
Coffee, tea, cocoa (instant)	18
Dry cream product (instant)	12
Bouillon products	12
Flavored beverage powders	24
Salt...will keep indefinitely	
Flavoring extracts, (e.g., pepper)	24
Soda, baking powder	12

An explanation of the difference in these shelf life estimates may be that the maximum keeping times relate to continued edibility, while the minimum times relate to maintaining top taste and nutritive values. Perhaps the best solution would be to rotate your canned goods by replacing items within a two-year period or less, to safeguard retention of vitamins and nutrients. Remember that canned goods bought in the summer, before the new crops are packed and at the market, have already been canned the better part of a year.

For the relatively foot-loose single person, or for couples living in tiny apartments and making repeated moves, a storage plan that heavily relies on canned goods is probably unrealistic. The lower weight, smaller storage space and infrequent need for rotation of dehydrated and freeze dried foods, could make them a preferred choice for your food reserve in these circumstances. Many processors of low-moisture foods put out poly plastic packages in small sizes suitable for one-meal servings. Since their most popular use is for backpacking, these items can be found in most wilderness or camping stores, as well as in some health food outlets. Although the individualized packaging makes them higher-priced, they may still be preferable for their convenience. This is especially true of the complete casseroles, stews, soups, and other entrees which the inveterate non-cook would find a godsend. Dehydrated and freeze dried foods in plastic packages will not store for 10 to 20 years as they will in vacuum sealed cans, but they will certainly remain fresh for several years if kept in a cool, dry area.

If you decide, when you've completed your first-stage, 2-week emergency food supply, that you should move into a longer term storage plan, there are a number of factors that you'll want to weigh. Some of these we've mentioned before: availability of water, your need for mobility and the size of your storage space, variations in the shelf life of products and in their prices. And there are other, less tangible matters to consider: are you psychologically the sort of person who will exert the self-discipline to rotate foodstuffs regularly? How important is convenience to you? Are you willing to put the additional time and energy into food preparation that it takes, say, to grind your own wheat for flour? Or are you the sort who wants to put the most permanent type of food aside, and to the greatest extent possible be worry-free and forget about it?

With these questions in mind, there are two main approaches that can be taken to long term food storing. Neither of these includes storing canned food to any extent, because the advantages that canned goods have for a short term crisis do not hold for a long term program. For example, the question of water supply, while of key importance in a temporary emergency, becomes irrelevant for a prolonged period. The point is summed up neatly by Bob Zabriskie in his book, "Family Storage Plan":

> If water service were not restored within a few days, would it really make much difference what kind of food one had stored? No one should forego the space, cost and rotation advantages of dried and dehydrated goods because of water fears... most people who have thought the matter through carefully feel that if there were not enough water with which to cook, there likely would not be enough to drink either.

Also, in the case of an extended food shortage, the elements of crisis and panic would no longer be primary– cooking methods and meal organization would be regularized so that less familiar food preparations could be tried.

In these circumstances, the superiority of low-moisture foods is apparent. A food product that weights from 36 to 45 ounces in dehydrated form will weigh approximately 24 pounds as canned food. A year's supply of canned goods and grain for four persons would fill a complete storeroom (the volume of only a 2-week supply is about 10 cubic feet), while the same supply of dehydrated food can easily be loaded into a station wagon–– so much for easy mobility. In considering storage life, most dehydrated products in vacuum sealed cans will keep well beyond ten years (dried milk and eggs are more perishable). This compares with our recommended rotation period of two years or less for canned goods. As to price, while one might question the estimate (by Pioneer Foods in their brochure, "Beat the High Cost of Living") that dehydrated foods cost about 35% less than canned goods, their cost is definitely much

lower, and they have over double the yield. Below is a comparison shown by Barbara G. Salsbury in her book, **Just Add Water.**

Dehydrated Goods Compared with Canned Foods

Canned Item	Can Size	Weight	Amount of Liquid	Amount of Product
Fruit Cocktail	No. 303	17 oz.	1 cup	1 cup
Green Beans	No. 303	16 oz.	1 cup	2 cups
Peach halves	No. 303	17 oz.	1 cup	1 cup
Peach slices	No. 303	17 oz.	1 cup	1-1/4 cup
Peas	No. 303	17 oz.	1-3/4 cup	3/4 cup

The above items are the wet pack cans you buy from the market shelves. In most cases half or more of the weight of the can is water.

Dehydrated Item	Dry Amount	Weight	Water Added	Yield
Fruit Galaxy	1 cup	4 oz.	1-1/2 cups	2-1/2 cups
Green Beans	1 cup	2 oz.	1-1/4 cups	2-1/2 cups
Peaches, sliced	1 cup	4 oz.	1-1/4 cups	2 cups
Peas	1 cup	4 oz.	2 cups	2-1/3 cups

Two cups of water were added to each of the dehydrated products above. After 24 hours the excess liquid was poured off and measured. This was done in order to arrive at the amount of yield.

One approach to a long term storage plan is to concentrate on stocking what Esther Dickey in her book, **Passport to Survival**, calls "the four basic survival foods": wheat, honey, milk and salt. The great advantage of these foods, in addition to their excellent nutritional value, is their durability for storing. Dark, hard, winter or spring wheat that has less than 10% moisture and has been thoroughly cleaned, will keep indefinitely when stored in well-sealed metal containers under proper conditions. (See section on "Good Food Storage Practice.") Some storage guides suggest aerating the wheat twice a year. Others recommend various methods of fumigating the wheat in advance of storing. However, take care using such treatments as methyl bromide gas, dry ice, or carbon tetrachloride; they involve definite dangers when carried out by unskilled amateurs. If you plan to use this type of pre-storage treatment, you should contact your local Department of Agriculture office or County Agricultural Extension Service about up-to-date procedures and advice on local conditions such as humidity. However, it is the view of Esther Dickey and other storage experts that it is not necessary to pre-treat wheat if it is stored under the proper conditions mentioned above.

The other "basic foods" also store well— honey (the pure crystalline kind with no water added) will keep indefinitely. If it should harden, just heat the can or jar (loosen lid first) in boiling water until the honey liquifies. There is greater debate about the keeping quality of non-fat powdered milk. Opinions range from 2 years, to 3– 5 years, to a high of 10 years (all under optimum conditions). Complete agreement exists, though, about the importance of keeping milk at a cool temperature; non-fat milk stored at 40^0 will keep twice as long as that stored at 70^0. It is also essential that powdered milk be kept very dry, so for storage it's worth buying the "extra" grade with a moisture content of less than 4%. You should store packages of dried milk in airtight cans to further protect it from deterioration; if milk is bought in bulk, dry out your storage containers in the oven and cool them before filling with milk. You can purchase non-fat powdered milk that has been vacuum-packed, which will store much longer than regularly packaged milk.

Of course, this "survival food" approach to storage provides a strictly emergency-type diet. Over a period of a year, an adult woman would consume approximately:

300 pounds of wheat
75—100 pounds of non-fat powdered milk
60 pounds of honey or 100 pounds of sugar
5 pounds of salt

In spite of the most ingenious recipe innovations that creatively combine these basic foods (including derivatives like wheat grass and sprouts), such a restricted regime would quickly become monotonous. Even to expand this reserve, as some storage planners suggest, with supplementary foods like peanut butter, dried peas and beans, or rice, would still yield a bare-existence diet. It is also a good question as to how well one would physically adjust to consuming such a narrow range of foods in quantities sufficient to sustain life over a prolonged period. If you are interested in experimenting with menus based on the four "emergency" foods, there are several good cookbooks available, with many imaginative recipes:

Wheat for Man - Rosenvall, Miller & Flack; 1966; 92pp. $1.95 postpaid; Bookcraft, Inc. 1848 W. 2300 S., Salt Lake City, UT 84120.

Make a Treat With Wheat - Hazel Richards $2.25 postpaid; Hawkes Publications, 4663 Rainbow Dr., Salt Lake City, UT 84107

Passport to Survival - Esther Dickey; 1969; 180pp. $3.95 postpaid; Bookcraft Inc., 1848 West 2300 S., Salt Lake City, UT 84120

or Whole Earth

A second approach to long term food storage aims to combine the durability of the basic survival foods with a more varied, more familiar diet. This is possible today because of a remarkable recent expansion in the availability and variety of dehydrated and freeze dried foods prepared for home storage. Low-moisture food products are nothing new. We buy them under the Madison Avenue guise of "convenience foods," as cake mixes, instant potatoes, soup and gravy mixes, gelatins and cooked cereals. But while these showily packaged items will keep well for only 3 to 6 months, dehydrated foods that are vacuum-packed for storage have a shelf life of from 10 to 20 years.

Dehydrated foods are not simply "dried foods" as we have traditionally known them. Such dried fruits as raisins, apricots and prunes that we buy in the grocery have only had their moisture evaporated down to a 25% level, where they are still vulnerable to deterioration and spoilage from bacterial and chemical processes. In contrast, the moisture content of dehydrated and freeze dried foods is taken down to as low as 2% - 4%. According to the Perma-Pak publication, "Culinary Capers .. or How to Use What You Store and Store What You Use," the product is then packed in a vacuum-sealed can from which the oxygen is removed, and an inert atmosphere is injected to retard calorie loss and color and flavor changes.

WATER

An emergency supply of water is crucial to your storage plan. While people have survived without food for extended periods, you probably could not go without water for much beyond a week. The minimum supply of water recommended for storage by Civil Defense authorities is 2 quarts per person daily; a gallon would be preferable, especially if part of your food reserve is dehydrated and needs liquid for reconstitution. For a 2-week period that would mean stocking 14 gallons of water per person.

Plastic bleach bottles are excellent for storing wat rinse carefully, fill with tap water, and add two drops of any common bleach (containing 5.25 percent sodium hypochlorite) per quart. Stir the mixture and let it stand for 30 minutes, by which time the taste or smell of chlorine should be apparent. If not, add a second dose to the water and let it stand for another 15 minutes. When you're able to detect chlorine in the water, seal the bottle tightly and store in a cool, dark place. Water treated in this way will keep well for long periods of time; to get rid of a flat taste, aerate by pouring water from one container to another several times. Commercially canned water is also available, which reportedly remains sterile for 25 years. To be prepared for a long term emergency, you might want to look into portable water puri-

fiers, which retail at about $40.

In an emergency, there are usually other sources of drinkable water in the home in addition to your stored water. The storage tank of the hot-water heater may contain from 20 to 60 gallons. (If you periodically open the drain valve at the bottom of the tank until the water runs clear, you can avoid a buildup of rust and sediment in this potential supply.) The water in the flush tanks (not the bowls) of home toilets is drinkable. If your water service is interrupted, or if you are instructed to turn off the

main water valve, you should turn off the gasline that supplies your hot-water heater also. Otherwise, continued heat will muddy the remaining contents, or possibly cause an explosion. Shutting off the main water valve also seals clean water in the pipes of your plumbing system. The water can be obtained by opening a faucet in the uppermost part of the house to let air into the system, and then drawing water off as needed from a faucet in the lowest part of the house.

Tip: In planning your storage supply of liquids, remember that any canned juices in your reserve will be best if processed with very little salt or sugar, so as to maximize their thirst-quenching potential. Canned meats with low-salt content should also be chosen, such as canned roast beef. Dietetic tuna fish and meats contain very little salt.

Unquestionably, low-moisture foods have many advantages for extended storage: small storing space, light weight, less need for rotation, convenience in preparation, and low cost are compelling recommendations. According to a representative of the Beehive Store (distributors of Deseret Supply Co. products), dehydrated and freeze dried foods have an average 74% retention of food nutrients compared with an average of 26% for canned goods, varying according to the food product. Deseret Supply claims a shelf life of 10 years for its egg and milk products; other items are quoted at a 25 year durability span. Pioneer Foods of Des Moines, Iowa, reports a shelf life of 10 to 20 years for its vacuum packed line; somewhat more conservative is Perma-Pak, who state that their products stay in good condition over "five, eight, ten years or more of storage." Probably the most persuasive statement is made by Earl Schmidt, Vice President of Bernard Food Industries in San Jose, California. He points out that although "some firms publicize that their products will last ten or twenty years or whatever, no one today can really predict what the nutritive loss in stored food items will be... There hasn't yet been a long enough period of experience with storing of foods processed and packed by modern methods, to make accurate shelf life predictions."

Bernard Foods, by the way, appears to be the only food processor to be marketing its own line of dehydrated and freeze dried products for food storage. Other storage brand names and distributors are selling foodstuffs procured from special firms in the dehydrating business. Bernard dries its own fruits and most of its vegetables, using no preservatives. By controlling the product from the field through to the customer, they can deal with any pesticides or preservatives remaining from the growing process. Involved for 25 years in the institutional low-moisture food market, Bernard has recently felt increasing demands from home storage customers. In response, the firm has inaugurated a new "Stor-a-Pak" line, featuring a series of complete entrees with beef and chicken. (Stroganoff, Tetrazzini, Pemmican Stew, Chow Mein and Chili Mac are a few of the casserole-style main courses, packed in No. 10 size containers that provide 100 or more servings, or in smaller poly plastic packages with either 50 or 16 servings.) The cost of a 3-ounce serving of an entree in this series is 10¢.

In response to increased interest in low-moisture foods, several recipe books have been recently published giving guidance to cooks in the correct use of these products. Their unanimous admonition is: experiment with your dehydrated and freeze dried foods now, rather than waiting till an emergency situation is at hand to try them. By working some of these recipes into your normal menu routine, you will gain confidence in the versatility of low-moisture foods and in your ability to make tasty meals with them. (You should try your experiments with the smaller packages, rather than opening up a No. 10 can and having to use it all or let it deteriorate with time.) Here are three books with many excellent, easy-to-prepare recipes that should make cooking dehydrated and freeze dried foods less intimidating:

Just Add Water
Barbara G. Salsbury
1972; 71pp.
$2.50 postpaid
from:
Horizon Publishers
P.O. Box 490
Bountiful, UT 84010
or Whole Earth

Helpful introductory material on the advantages of dehydrated foods, how to plan a storage program around them, and how to use them most effectively. The recipes, which Mrs. Salsbury personally developed, range over every part of the daily menu.

Mix N' Moisten Meals
Ruth Stephensen
1974; 92pp.
$2.50 postpaid
from:
Bookcraft Publishers, Inc.
1848 W. 2300 S.
Salt Lake City, UT 84120
or Whole Earth

Just published this spring, a collection of over 200 recipes that includes such favorites as pizza, chicken pot pie, donuts, sour cream cabbage, and carrot cake — all made from dehydrated foods.

Culinary Capers
Perma Pak
1972; 155 pp.
$2.95 postpaid
from:
Horizon Publishers
P.O. Box 490
Bountiful, UT 84010
or Whole Earth

An introduction to low-moisture food cooking, with good information on substitutions and tables of equivalent amounts, sample yields, and comparisons with fresh foods. The greater part of the book is devoted to recipes using dehydrated foods, with many menu suggestions and helpful hints to make you an accomplished and versatile cook of "lo-mo" meals.

ETHICS OF FOOD STORAGE

As I got into the writing of this article, certain questions began to nag at me. Wouldn't encouraging people to store food help bring on the very food shortages we're concerned about? By urging "self-reliance" and "independence of the system" through stockpiling food, do we also encourage that streak of "take care of number one first" that runs through the American character? How many people does it take who "opt out" of a commitment to the larger society to create not a "run on the bank" but a "run on the country?" Not to mention right-wing paranoia that subversives and "government control" have undermined the system to the point of incipient collapse. 'If we'd just let people fend for themselves, everything would be fine'--they'd be only too happy to see survival of the fittest take over and weed out the misfits and parasitical poor. Because of course it's the well-off who would be able to afford a "year's supply"--while millions worry about where tomorrow's meal is coming from.

Heavy thoughts. For most of us, the concern about unequal ability to store food is casuistic. We don't worry about the hungry when we sit down to our ample daily dinners. Moral consistency is for places like the Zen Buddhist Center in San Francisco, which has decided not to store food because they are located in a poor inner city area where having a stockpile of food would invite enmity. Or maybe that's simply self-preservation working for the Center.

The main question seems to be whether my storing food is actually going to be detrimental to someone else's welfare. To answer that 'yes' presupposes that there will be widespread, imminent shortages of food in the United States. Agricultural economists do not support this assumption. They say international famine exists, and always has in various places at various times; but the immediate forecast for the U.S. only indicates short-term shortages of particular foodstuffs. In spite of fertilizer and energy crises, American farmers will likely hike their production considerably this year. Short of cataclysmic weather, diminished world food reserves should be built up somewhat--at least temporarily--with American surpluses. The longer view is something else again.

In this situation, I think food storage can be recommended in a positive way. As Dr. Kirby S. Moulton of the University of California Agricultural Extension comments, "enough people with enough money being sufficiently motivated to store enough food to seriously dislocate the national food market today" is not a scenario which he can envision. On the other hand, it is possible that deliberate governmental accumulation of food reserves, as well as individual food storage, could provide a stabilizing factor in the current uncertain market for agricultural crops. Henry Schact, farm reporter for the San Francisco Chronicle, points out: 'Farmers are wary of the 'boom and bust' they have gone through in the past. They are not at all sure that, as some say, we are now on a new plateau of world food demand which will guarantee them a reasonable price for whatever they can produce. They are very much afraid that all-out production can again lead to market collapse."

In the same vein, at the recent Western Governor's Conference on Agriculture Governor Judge of Montana said, "If we are to become the granary for the world, the federal government must share the responsibility and the risk with the ranchers." The conference report recommends "no further increase in development of crop production until there is reasonable assurance that demand will guarantee markets at fair prices," To the extent, then, that individuals buy food in more plentiful times for storage and use it in times of shortage, they help to even out the demand situation for the farmer and undergird a more stable price structure. Furthermore, the ability of citizens to take care of themselves in time of food crisis, whether caused by natural disaster or economic conditions, renders the task of civic or government support agencies that much easier.

The point is, don't wait till the crisis is at hand to rush out in a panic and compete with your fellow citizens for the dwindling stocks. Build up your reserve gradually in times of relatively good supply and cheaper prices. Food prices may temporarily stabilize later on in this year. **U.S. News and World Report** *commented in its May 13, '74 issue, "Prices received by the nation's farmers tumbled 6% from mid-March to mid-April, after a 4% dip the previous month." This drop indicates a possible leveling off in food prices to the consumer toward the end of '74. There is, of course, the chance of misjudging the best time to buy--watch the food market reports and check out farm reporters' columns for knowledgeable predictions. However, informed opinion says that because of increased energy and transportation costs, as well as the determination of the U.S. to export food for improved balance of payments, there is small likelihood of any real rollback in retail food prices.*

Beth "Chicken Little" Fairbanks and the Perma-Pak YEAR'S SUPPLY of food.

There are a number of firms handling food products for home storage that market package deals on a "year's supply" of dehydrated and freeze dried foods. Charles Hartman, sales manager for Pioneer Foods, reports that he has seen prices recently varying from $274 to $523 for the basic unit which is intended to feed one person for one year. Here are some prices for a year's supply, quoted by several of the more popular storage food companies:

Perma-Pak, Inc. 40 East 2430 South Salt Lake City, UT 84115	$383.70, Basic Unit $447.40, Basic Unit + 2 Supplements (FOB Salt Lake City)
Pioneer Foods 215 East Third St. Des Moines, Iowa 50309	$425.00, FOB Des Moines shipping charge $20 to either coast
Lanello Reserves 2112 Santa Barbara Santa Barbara, Calif. 93105	$395.00, (400 lbs.) FOB Santa Barbara
Sam-Andy Dehydrated Foods 525 South Rancho Colton, California 92324	$342 (207¼ lbs FOB Colton) (Basic Unit with wheat, 18 month supply)
FSP Foods 6200 Hollis Street Emeryville, Calif. 94608	Units at $375 and $460 (400 lbs.) FOB Emeryville
Bernard Food Industries, Inc. Box 487 San Jose, Calif. 95103	Does not package a "year's supply" per se; customer may choose supply from product lists; shipments of over $200 are pre-paid

You should be aware of several factors in choosing a supplier for your storage needs. Obtain several distributors' lists and make careful comparisons of what items are offered as part of a year's supply——products making up the unit may vary considerably from one company to another. For instance, check how much wheat, if any, is part of the assortment, since wheat is cheaper per pound than other products. Note whether the distributor stipulates that he can substitute one product for another, without notice. You may find, as one buyer did, that you receive a No. 10 can of green peppers instead of the expected dried apples. Ask about delivery times——some firms have low inventories and are running very late with shipments. By contacting the central offices above, locate a sales outlet near you, to try out products directly and save on shipping. Deseret Supply Company and Sam-Andy have local distribution outlets nationally, with coverage most heavy in the Western states.

The idea of keeping a "year's supply" of necessities is one that the Mormon Church has preached and practiced since Brigham Young advised, "Brethren... lay up grain and flour, and save it against a day of scarcity. Sisters... aid your husbands in storing it up against a day of want, and always have a year's or two, provision on hand." This admonition was particularly strengthened during the drought and depression of the 1930's. To counter the "dust bowl" conditions and joblessness that brought poverty to farm and city dwellers alike, Mormon leader Harold B. Lee inaugurated the "Church Security Program." Believing in individual self-reliance and communal care of the needy within their own church, the Latter-Day Saints have set up around 130 "Bishop's Storehouses" to stock and distribute foods that are produced on Mormon farms and in Mormon mills.

Church families are constantly reminded of their duty to have a "year's supply" on hand. In a recent interview in the Los Angeles Times, John Russon, a representative of the Council of Twelve in the Bakersfield/Pomona Region, estimated that about one-fourth of Mormon families in his area have set aside food for a year in their garages, basements and closets. Another estimate, by Dr. R. David Lauper, a group leader in the Elders Quorum in a New York ward, is that as many as 30% to 40% of Mormons nationwide are stockpiling food. Dr. Lauper remarks, "People used to laugh at us for storing food .. but now that we've gotten so far away from being self-sufficient, the threat of food shortages is real."

Most of the books about food storage plans, procedures and practical advice are written by Mormons, primarily for Mormons. With that in mind, here are brief evaluations of some of the more useful of these publications, which afforded much good information for this article:

Gateway to Survival is Storage (12th Edition)
Walter D. Batchelor
1937, 1973; 35pp.
$ .75 postpaid
from:
Walter D. Batchelor
6120 E. Boston St.
Mesa, AZ 85205
or Whole Earth

Least expensive of the storage sourcebooks, with the most information for your money; first printed in 1937, now in its 12th, newly revised edition (Oct. '73). Often quoted in other books, Batchelor includes considerably less religio-political commentary than other storage writers. Brief, concise instructions for planning and carrying out a food storage program; no recipes.

Family Storage Plan
Bob R. Zabriskie
1966; 58pp.
$1.75 postpaid
from:
Bookcraft, Inc.
1848 West 2300 S.
Salt Lake City, UT 84120
or Whole Earth

Good information both on the "four basic foods" and canned goods storage. Provides a variety of excellent procedures and tips, but also includes quite a few pages of homilies and quotations from church authorities; relatively little social/political discussion. Published in 1966.

Passport to Survival
Esther Dickey
1969; 180pp.
$3.95 postpaid
from:
Bookcraft, Inc.
1848 West 2300 S.
Salt Lake City, Utah 84120
or Whole Earth

Food storage program based on the four "survival foods," with extensive section of innovative recipes designed to get the most variety out of this restricted diet. The book's introduction tends toward prophetic melodrama but the text gives cheerful, clear instructions about how to prepare for emergency situations. Published in1969, Passport to Survival is in its 15th printing (revised 1973); shortly to come from the publisher is a second volume which will be "one-third gardening, one-third storing and using, and one-third emergency preparedness and energy use."

How to Be Prepared
Roland Page
1973; 69pp.
$3.00 postpaid
from:
Independence Publications
Box 426
Centerville, UT 84014
or Whole Earth

Compiles a number of helpful procedures and charts (use food inventory lists, nutritional comparisons, tables of drying times and yields for fruits and vegetables), designs (homemade water distilling system, canned goods rotatio bin, do-it-yourself smokehouse), and suggestions (to repe weevils, wash your food storage containers with detergen rather than soap). Page takes a very hardline view on "la & order," subversives, wives who are deliberately child-less, and the unreligious. Although he opines that his writing "will have no meaning for agnostics or 'intellectuals' whose mental 'pipeline' is only concerned with worldly esteem, possessions, and uninspired do-goodism, "the book is a useful resource'

(All of the above books are available from Bookcraf Publishers, 1848 West 2300 South, Salt Lake City, Utah.)

The Storage Bin, 4300 South 4850 West, Granger, Utah, puts out a monthly magazine "dedicated to help people store food and prepare for the future." For $3.00 per year or 30¢ a copy, you can get good ideas on basic food storage, gardening, sprouting, herbs and spices, and edible wild plants.

Good Food Storage Practice

THE PROPER ROOM

The ideal storage space is dark and cool, is dry in all seasons of the year, is free from steam, hot water hot air pipes, and odors (particularly soap, onions an petroleum products), and is closed off from the rest the house. A basement is good——if damp, it helps t paint the outside of food cans with an oil-base paint If there's no basement available, use a closet or garag on the north side of the house. In a small apartment with few storage options, you should place foodstuff against an outside wall during winter months when rooms are heated; in the summer the coolest place will likely be an inside wall or closet. Never store yo food directly on a cement floor. Use a base of wood slats under your cans to prevent sweating and rusting

CRITICAL TEMPERATURES

There are three temperatures you should keep in mind when storing food. One is freezing——many foo will deteriorate if allowed to become frozen. A secon is 48° F, the temperature at which most insects beco active. The third is the temperature at which fat mel about 95° F. A general rule suggested by Bob Zabriskie is to maintain the lowest temperature shor of freezing for your storage goods. The optimum wo be between 40° and 60°——anything over 70° begin to be detrimental.

ROTATION

In planning your emergency food supply, pick canned goods that you really like and use regularly; that way you'll be able to rotate them easily within your usual menu schedule. Mark the date of purchase on your supplies, and keep a running list of your inventory. Several of the resource books mentioned in this article have forms, ranging from simple to elaborate, to help you keep track of your rotating stock. Roland Page in his book, **How to Be Prepared**, and Walter Batchelor in **Gateway to Survival is Storage**, show designs for building your own rotation bins for canned goods.

TIPS

Commercial canned goods should be turned upside down every six months or less (canned milk every 30 days) to prevent solids from settling out.

Be sure that glass containers of food are stored in the dark, since light can cause vitamin loss.

Cans that are bulging or leaking should be discarded; rusted cans are all right unless the rust has caused a perforation in the can.

When reconstituting powdered milk that has been stored for a time, you should use less of it per volume of water than normally. The milk settles and becomes more compact, so that the usual measurement of powder tends to make too strong a flavor.

Remember: vitamins in regular packaging do not keep very well——one year is usually the maximum for reliable potency. Vacuum packed vitamins, on the other hand, have a shelf life of five years, according to a representative of Deseret Supply Company.

Top candidate for storage: vacuum packed seeds. In a long term emergency you would certainly want to plant a garden, and these seeds have a shelf life of 20 years. The "Survival Garden" (Clyde Robin, P.O. Box 2091, Castro Valley, CA 94546) packs ten lasting seeds for $6.00.

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Turning on to the subject of food storage may be just the start of your becoming more self-reliant about food... There are

More Ways to Beat Food Prices and Shortages

FOOD CONSPIRACIES—— One effective way to begin the transition from total dependence on the supermarket system is to organize a food buying group. By allowing you to bypass as many middlemen (grocery store, warehouse, packager) as you desire, food conspiracies can provide large savings, better quality food products, and a direct "in" to the farmer's marketplace. You can save yourself a lot of mistakes, and profit from the first-hand experience of people who have organized successfully, by getting the **Food Conspiracy Cookbook and Members Manual** (see Pg. 589). This is a candid, reliable rundown on the mechanics, obstacles and satisfactions of operating a buying group. As the writers point out, "Not only will you save money, you will also learn how our structured society works, and you will discover how much power a few people with pooled money and energies can have." The recipes look good, too!

GROWING YOUR OWN VEGETABLES——Backyards and vacant lots are being turned into garden plots all over America this year. (Even apartment dwellers can grow vegetables like radishes, onions and cherry tomatoes in 10-inch window pots.) Your local Department of Agriculture office can give you information and free pamphlets like "Home Vegetable Gardening," "Mulches for your Garden," and "Soil and Water Management for Home Gardeners."

More good info is in:

The Basic Book of Organically Grown Foods
Staff of Organic Gardening and Farming
M.C. Goldman and William H. Hylton, Eds.
1972; 336pp.
$1.50 postpaid
from:
New American Library
1301 Ave. of Americas
New York, NY 10019
or Whole Earth

and:

Grow Your Own
Jean Darlington
1970; 87pp.
$1.75 postpaid
from:
Bookworks
c/o Random House
Westminster, MD 21157
or Whole Earth

If this is your first venture into growing vegetables, you might want to work in a co-op garden to learn the basics; there are quite a few neighborhood gardens being started in urban areas these days. The best food values for your space: spinach, snap beans, cauliflower and tomatoes.

CANNING YOUR OWN FOOD—— There are drawbacks as well as satisfactions in home canning: it takes extreme care, especially vegetables. Also, Sylvia Porter passed the word in April that canning equipment, quart jars in particular, will be in short supply by late spring. Will canning really save you money? Only if you already have a reasonably large vegetable garden going, says Porter. "If you have only a 6-by-10 foot garden, or you're thinking of preserving the fresh produce you buy at the market, reconsider. It will be cheaper to buy the canned goods even in this murderous inflation era."

HOME FOOD DEHYDRATING—— Dehydrating your own food can be a practical approach to food storage—— and to beating high prices. An excellent guide is:

Home Food Dehydrating
Jay & Shirley Bills
1973; 84pp.
$3.95 postpaid
from:
Horizon Publications
P.O. Box 490
55 E. 300 S.
Bountiful, Utah 84010
or Whole Earth

There is also a good section on this subject, as well as on meat smoking and on salting and brining, in Esther Dickey's **Passport to Survival**. Beef jerky, dried fruits and vegetables, and fruit leathers are only a few of the food items you can preserve by dehydrating. . . Commercial food processors who were questioned did not know of any firm with equipment available to the public for freeze drying your own food crops. One company official remarked, however, that it sounded like a very good idea.

YOUR OWN MEAT SUPPLY——Would you believe that rabbits can be easily grown for meat production in urban areas? "Raising Rabbits in Berkeley" (a 3-part series in Berkeley's Ecology Center newsletter for March, April and May '74) tells you how. "When properly managed, rabbits can provide the urban ecologist with a waste management tool for the conversion of kitchen and garden wastes into low cost animal protein, a source of nitrogen rich manure and urine for the compost, pelts appropriate for use as clothing and blankets... For the urban gardener, whether a vegetarian or omnivore, rabbits will complete one's urban garden eco-system." Details about cost, stock, feeding, breeding and meat production are available from: The Ecology Center, 2179 Allston Way, Berkeley, California 94704, in a reprint of the newsletter series (also contains a reprint on urban chicken raising.)

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Corona Flour Mill

If you plan to store wheat berries for your long term program you will naturally need a flour mill. The most popular hand-operated stone mill is the Corona. If interested, you should move on this soon, as it is already reportedly backordered. You'll probably get quicker action through a retail outlet. If you already have a steel-bladed Corona, there is a conversion kit available. The advantage lies in the quick conversion from steel to stone and back again; the disadvantage is that the stones are usually a hard fit, and you may have to bore out holes on your steel-bladed mill.

—DB

Corona Hand Mill
Steel-bladed mill:
$15.98 Postpaid West of Rockies
$16.98 Postpaid East of Rockies

Conversion Kit:
$22.50 Postpaid

Stone-bladed mill:
$37.50 Postpaid
from:
R & R Mill Co.
(formerly Smithfield Implement Co.)
45 West First North
Smithfield, UT 84335

Steel-bladed mill:
$18.00 Postpaid

Conversion kit:
$25.00 Postpaid

Stone-bladed mill:
$40.00 Postpaid
from:
Whole Earth

Mill & Mix

Among the electrically operated, more expensive mills, Mill & Mix is highly recommended. It features a dial for varying fineness in grind, and comes with a handle to use in the absence of electric power. The mixer attachment mixes and kneads any dough, beats candy.

—DB

Mill & Mix
$235.00 plus shipping/Mill
$95.00 plus shipping/Mixer
$330.00 plus shipping/Both Mill & Mixer

from:
R & R Mill Co.
45 West First North
Smithfield, UT 84335

COMMUNITY

First Aid

Two brand-new editions, with current techniques and information. Many sections are the same in both books; keep a copy of **Standard First Aid** *at home* **Advanced First Aid** *is written for paramedics, and has more complete information in some areas. Both have very good drug abuse sections.*

—DB

The use of a tourniquet is dangerous, and the tourniquet should be used only for a severe, life-threatening hemorrhage that cannot be controlled by other means. Tourniquets are used far too often and are rarely required; they should not be used except in critical emergencies when direct pressure on appropriate pressure points fails to stop bleeding. *The decision to apply a tourniquet is in reality a decision to risk sacrifice of a limb in order to save a life. Once a tourniquet is applied, care by a physician is imperative.* (NOTE. A tourniquet should be at least 2 inches wide.)

Standard First Aid & Personal Safety
The American National Red Cross
1973; 268pp.
$1.95 postpaid

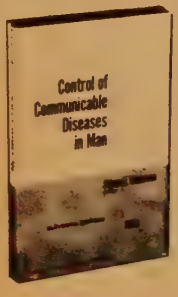
Advanced First Aid & Emergency Care
The American National Red Cross
1973; 318pp.
$2.50 postpaid

both from:
Doubleday & Co. Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Control of Communicable Diseases in Man

The purpose of the manual is "to provide an informative text for public health workers of official and voluntary health agencies. . . It enters into plans for anticipating the health risks attendant on natural and man-made disasters, and serves as a guide to control of the disease situations such emergencies create." Gives for each disease: identification and symptoms, occurrence, infectious agent, reservoir, mode of transmission, incubation period, period of communicability, susceptibility and resistance, and methods of control. A good reference to have around, for what a doctor can't be bothered to tell people. . .

—Nancy Lane



Control of Communicable Diseases in Man
(An Official Report to the American Public Health Association)
Abram S. Benenson, M.D., Ed.
1970; 316pp.
$2.75 postpaid
from:
American Public Health Association
1015 18th St. N.W.
Washington, D.C. 20036
or Whole Earth

Since 1962 South Vietnam has experienced a marked increase in plague, with several thousands of cases of bubonic plague, both urban and rural, and scattered cases of pneumonic plague. In many areas of the world, plague continues to be potentially dangerous because of vast areas of persisting wild rodent infection and commingling of wild rodents with domestic rats.

A. STAPHYLOCOCCAL FOOD POISONING

1. Identification—An intoxication (not an infection) of abrupt and sometimes violent onset, with severe nausea, cramps, vomiting, usually diarrhea, and prostration; often with subnormal temperature and sometimes markedly lowered blood pressure. Deaths are exceedingly rare; duration of illness is commonly not more than a day or two, but its intensity may result in surgical exploration in sporadic cases. Diagnosis is usually through recognition of a group of cases with the characteristic acute, predominantly upper gastrointestinal symptoms and the short interval between eating a common food item and the onset of symptoms.

Recovery of large numbers of enterotoxin-producing staphylococci on routine culture media from stomach contents or a suspected food item supports the diagnosis. Phage typing greatly aids epidemiologic investigation.

Differential diagnosis considers other recognized forms of food poisoning, and epidemic nausea, vomiting and diarrhea (winter vomiting disease).

2. Occurrence—Widespread and relatively frequent; one of the principal acute food poisonings in U.S.A.

3. Toxic agent—Several enterotoxins of staphylococci stable at boiling temperature. Staphylococci multiply in food, producing the toxin which causes poisoning.

4. Reservoir—In most instances man; occasionally cows.

5. Mode of transmission—By ingestion of any of a wide variety of contaminated food products: pastries, custards, salads and salad dressings, sandwiches, sliced meats and meat products in which toxin-producing staphylococci of human origin (from purulent discharges of an infected finger, abscesses, nasal secretions, or the apparently normal skin of hands and forearms) or of bovine origin (contaminated milk or milk products) had multiplied in food allowed to stand for several hours before serving. Ham and bacon, pressed meat, milk from cows with infected udders, occasionally dried milk, have sometimes been implicated in extensive outbreaks.

Mormon Advice

It's time for a deep bow to the Mormons for their research and practice in food storage and general-emergency readiness.

Here is the full text of a recent message to Mormons here in Marin County (sent to us by Kathy Mayer). It has forethought considerations—— and generosity—— we've seen nowhere else in the doom literature generally available.

—SB

THE CHURCH OF JESUS CHRIST
OF LATTER-DAY SAINTS

Marin Stake Novato, California 94947

Church Welfare Program - Stake President's Message
Individual and Family Preparation

TO:

THE MEMBERS OF THE MARIN STAKE

As President of our stake I have been concerned about our making provisions for our families in emergency situations that may come to any of us as a result of illness, unemployment, fire, riot, economic dislocation, war, earthquakes, etc. It is not my desire to make a mountain out of a mole hill but I do think we should consider the problems that may confront us and how they relate to the area where we live, and to our families.

The Church Program does not include the concept that we will all flee to Utah if an emergency comes. The Church in Utah would not be able, nor does it expect to send us supplies to meet all emergency situations. Instead we are expected to take care of our selves and continue building up the kingdom here in our area.

We are all familiar with the prophecies that point to the fact that we are living in the last days. Prior to the coming of our Lord and Savior, Jesus Christ, we know there are to be troubled times, with wars, rumors of war, strife and tumult, until the whole earth will be filled with confusion and chaos, so much so that it will be difficult to know right from wrong, and eventually will bring an end to nations before the Savior comes. We have many promises that the Lord will preserve his people if they have lived righteously. This does not mean we will individually be spared from the challenges and hardships that will accompany this period. I do have a firm belief and faith that the Lord's plan will triumph in the earth, making the eventual establishment of a millenial reign of peace with the Church forming the basis of a stable government under Christ.

The most important thing for us to do is live righteously no matter what happens to us in terms of physical difficulties so that our goal of exaltation in the Celestial Kingdom will be assured. It should be the goal of every member of this stake and every family to build spirituality into our homes so that we will be better able to live Christ-like lives thus making it possible to come before our Father in Heaven to seek his guidance, direction and protection. To enjoy these blessings we should meet each request to work in His church and in His Kingdom on the earth, in welfare assignment, money raising projects, on ward chapels etc., and see to it that each request and assignment is met fully and properly to the best of our ability. If we fail in doing this we will be unable to work cooperatively with our fellow men when serious emergency situations arise.

The Prophets of the Lord have given us direction in what to do. In the June 9, 1973 issue of the Church News the "Autonomous Welfare" area was presented. Areawise we can expect more and new welfare projects with increased interstake cooperation with each of us asked to meet increased responsibility with both work and sacrifice.

In the meantime there are things we should and can do. Listed below are some specific suggestions that will be helpful in making preparation for the future, if and when a problem may arise:

1. Get one year's supply of food, including some permanent type storage as well as rotatable stock. If this cannot be done get as much as you can, a little at a time.

2. Get yourself and family out of debt. Avoid unwise debt. (Do not charge anything you cannot pay for in full when the bill is presented.) Be sure each member of the family understands the family finances and knows where important papers are kept.

3. Plant a garden and fruit trees. Use part of your lot to develop a home garden. Plant fruit trees in place of general type shade trees so that we can produce fruit to eat and for canning purposes.

4. Get a supply of wood that can be used for heating and cooking if gas and electricity should be lost.

5. Have some candles and a supply of dry matches on hand. A kerosene lamp, kerosene (this must be stored safely) in a tight metal container.

6. Arrange a source of water in case of an emergency. Store many gallons in Clorox bottles or similar containers to be used in emergency for drinking and preparing food. If possible a well on your lot may be beneficial.

7. Learn how, and prepare food for storage and use over the winter by canning or drying. Have on hand some bottles and caps for home canning.

8. Talk with your neighbors about cooperation. Find out their resources and how you can help them and they in turn help you.

9. Be ready and willing to cooperate with your police, firemen and civil defense in their efforts to meet emergency situations.

10. Be prepared to show true brotherly love and service to others by sharing with those truly in need. True brotherly love in harmony with the gospel would be to share rather than fight and drive people away.

11. Have all necessary shovels, spading forks, hoes, rakes, hammers, nails and other tools that may be needed.

12. Have on hand a roll of plastic material that could be used to cover windows, if broken.

13. Have on hand a years supply of clothing, extra blankets, shoes, etc., to share with those who may have lost everything.

14. Be ready to take some one into your home, and care for those injured or in need.

15. Be ready to care for the sick, have some medical supplies and provisions on hand (including special medicine vitamins, insulin, etc.) if needed.

16. Know and understand sanitary procedures and how to implement them in case of need.

17. Know who your home teachers are and how to get in touch with them.

18. Be ready to work for what you get. Do not expect a handout so long as you are able to work. Seek to repay in labor or services for all help received. Be ready to help others without repayment.

19. Have a year's supply of money on hand where it could be available in case an emergency should arise.

20. Have an emergency kit prepared (food, clothing, bedding, medicines, first aid) on hand, so you could move to temporary quarters if circumstances warranted doing so.

21. The Stake Presidency, High Council or your Bishopric would appreciate hearing from you and how you feel about these matters. Especially if you have some suggestions, write them down and send them to us.

We encourage you to live so that inspiration for you and your family may be forthcoming. Use your personal initiative in preparing for the future and then seek help from the Lord.

May the Lord bless us so that we may enjoy the blessings that come from working together with all good people to accomplish the righteous purposes necessary in preparing the way for the establishment of peace under our Lord and Savior, Jesus Christ.

Sincerely your brother,
Weston L. Roe

President, Marin Stake

Pocket Horn

No mugger can keep his mind on business while his eardrums are being torn by this 118 decibel shriek. If there's help (or curiosity) around, it'll come. Tiny, cheap, effective device. (Robert Mitchum it was who suggested this item, in the course of a Rolling Stone *interview.)*

—SB

Pocket Horn
$3.25 postpaid

from:
Edmund Scientific Co.
300 Edscorp Bldg.
Barrington, NJ 08007

The Book of Survival

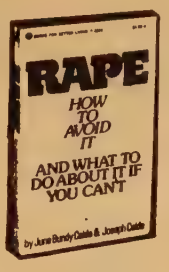
Still the best handbook on how to prevail over fierce situations—— especially urban ones—— is Anthony Greenbank's The Book of Survival *(Pg. 274). Reportedly the author is writing another book especially for city emergencies.*

—SB

Rape: How to Avoid It and What to Do About It If You Can't

Hard core information—— everything that's known about rape, well organized and readable, it lives up to its name. Includes phone numbers and addresses for Rape Crisis Centers—— rapidly growing in number and effectiveness.

—DB



Rape
(How to Avoid It, and What to Do About It If You Can't)
June Bundy Csida & Joseph Csida
1974; 238 pp.
$1.50 postpaid
from:
Books for Better Living
21322 Lassen St.
Chatsworth, CA 91311
or Whole Earth

Rapists are fiendishly inventive, and drugs, alcohol or a state of retardation often makes them commit rape in places where interruption is virtually certain.

Rapes have been committed in public restrooms, dress shops, doctors' and dentists' offices, hospital beds, and classrooms. An elementary school teacher in Brooklyn was raped at knife point with her second grade students as terrified audience.

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Hitchiking is "rape roulette." The best advice we can give any woman is NEVER HITCHHIKE. The woman hitchhiker is prime "rape bait" and worse. Hitchhikers disappear every day. Some turn up raped; others are found raped and murdered; others are never heard of again.

We realize public transportation is woefully inadequate in some cities—— particularly in Los Angeles, described by former Police Chief Tom Reddin as "the rape capital of the world." But we urge women to use any other form of transportation—— bus, subway, a friend's car, or their own two feet—— rather than literally put their lives on the line by hitchhiking.

•

"Men may not believe it (I'm sure male doctors don't), but a pelvic examination is one of the most unpleasant things modern women contend with. And the worst time to have one is a half hour after being raped."

But Ms. McDermott hastens to add: "It is all but impossible to get a conviction without one, however, and the implication is that the woman who refuses to have a rape check is lying."

•

Of all adults arrested for forcible rape in 1972, 73 percent were prosecuted for this offense. Prosecutive problems accounted for acquittals and/or dismissals in 49 percent of the cases. 32 percent of the adults prosecuted were found guilty of the substantive offense and 19 percent were convicted of lesser offenses.

•

We asked several high-placed persons in the Bureau of Criminal Statistics office in Sacramento whether they thought the number of unreported rapes would be closer to the three or to the ten times reported figure. Off-the-record, don't quote me, they said they thought the ten to one figure would be closer to the truth.

•

Most feminists consider the Rape Crisis Center in Washington to be *the* model of an ideal anti-rape project. Indeed the D.C. women have personally inspired many similar centers cross the country, via the sale of **How to Start a Rape Crisis Center**, a 40-page booklet detailing, step-by-step, the birth, care and maintenance of their own program.

The Center also issues a bi-monthly newsletter, which reports on the progress of rape crisis projects, anti-rape legislation and related material. (For more information about either publication, write to The Rape Crisis Center, P.O. Box 21005, Washington, D.C. 20009.)

11

VISIT TO A NUDE EXORCIST PARLOR

"I'd like you to check out that nude exorcist parlor," Chocolate Graham is saying. "Make sure it's not a front for prostitution. That could be used to discredit us."

And so Tongue Fu wanders toward the area of Camp Crap that has come to be known as Participation Valley.

There is a makeshift solitary confinement cell in which a former prisoner teaches his method of Enforced Meditation for twenty-three-and-a-half hours a day.

Further down, there is a continuing experiment on the effect of conflicting prayer upon plants. For couples only. A middle-aged wife and husband take turns speaking to a row of tomato plants.

She: "Please, God, let these luscious plants grow!"

He: "Don't grow, you lousy red bitches!"

She: "Give them nourishment, oh Lord above!"

He: "Wither and die, you little mothers!"

She: "Hear me, Jehovah, protect these helpless beings to survive on their native American soil!"

He: "Go back into the dirt, you filthy pinko greenies!"

She: "Give them strength through photosynthesis, I beseech you!"

He: "Kill! Kill! Kill!"

Tongue Fu watches with weary preoccupation, then moves on to a shack decorated all over with Persian bedspreads. Standing in front, wearing a nun's outfit, is Virginia Real, fingering her rosary beads.

"Would you like to have a nude exorcism? Only ten cents a minute. Come on in, take your clothes and get rid of whatever evil thoughts possess you ...."

Flashiebackie:

Young Virginia Real, wearing a pressed convent school uniform, sits on one side of a confessional booth, twisting her flame-red hair.

"I let a boy feel my tits last night."

"Breasts," the priest on the other side corrects her. "Tits are vulgar."

"My breasts. First the left one. Then the right one. Then both together. Then just the left one again. Then— "

"You mustn't permit a representative of the devil to take advantage of your body, my child. That is a privilege which has to be earned."

"But why does God make it feel so nice then?"

"Allow me to quote from the Scriptures." He leafs through a Bible. "Here it is, the Book of Job. 'What? Shall we receive good at the hand of God, and shall we not receive evil?' "

"I've read that too, Father, and it seems to me that God tosses out good and evil arbitrarily, just because Satan taunts him into it."

"God was testing Job's faith."

"Well, I think God's on a terrible ego trip then."

"For shame. For shame."

"If I were God, I would've just let Job alone."

"Please, we're getting off the subject. Now, you say it felt nice for this boy to feel your breasts. But your guilt doesn't feel so nice, eh? ..."

Tongue Fu has removed his clothes. So has Virginia Real. They sit naked on facing chairs.

"Love your third eye," she says.

"You have pink pubic hair," he observes.

"Yes, I know. Now tell me, exactly what would you like to have exorcised? Don't be shy."

"I want to know— I am wondering if— you are a— prostitute?"

"Ah, I understand what's troubling you." She takes a deep breath, clasps her hands and moves her lips in a silent prayer that gradually becomes audible. "Begone, oh, demon of commerce! . . . Free this victim of your mercenary ways!... Cast out thy exploitative self from this walking prison!. . ."

After ten solid minutes of being harangued in such fashion, Tongue Fu asks her to stop.

"I feel," he says, "as though I am being turned into a human tomato plant."

Virginia Real glances at her clock. "You owe me one dollar. Look, I'm not a hooker, but I do think you're kinda cute. Would you like to ball or anything? No charge."

"I would be grateful"— he hesitates— "if you would massage— my tongue."

He moistens a dollar bill with the tip of his tongue, leaves it sticking there and passes it to her.

"Holy muscle! ... Would you"— she hesitates— "whip me— with your tongue?"

"I do not wish to inflict pain."

"Oh, please. You'll be inflicting pain if you don't. I'll give you your dollar back if you do it."

"But that would make me a prostitute."

"I'll tell you what. I'll massage your tongue if you'll whip me with it."

"But"— he is obviously tempted— "would that not be prostituting my tongue?"

"Think of it as barter," she says, limbering up her fingers.

As if in belated response to the Jackie Kennedy rubber mask in that Times Square Amusement Center window, the third eye tattooed on Tongue Fu's bellybutton winks at Virginia Real while she whines with pleasure at each slimey lash of his sacred tongue across her lower back.

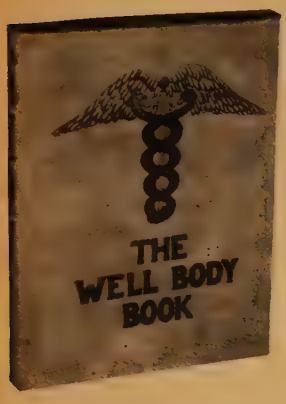
[Continued, page 619]

COMMUNITY

The Well Body Book

A rather well done, simple home doctor book. It takes some of the mystery off of the human body—— anatomy and function; the existence of illness; and the tools of the doctor and what he does with them.

—R.D. Chamberlain, M.D.



The Well Body Book
Mike Samuels, M.D. & Hal Bennett
1973; 350pp.
$5.95 postpaid
from:
Random House/ Bookworks
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

If you have a fever and it is making you very uncomfortable, there are some ways to get relief: increase your fluid intake; sponge your body off with cold water; rub your body with rubbing alcohol. A warm bath causes opening of the skin blood vessels, which brings your blood closer to the surface and helps to bring the fever down. Ice bags are sometimes used to reduce body fever, too.

•

The Television Diseases:

Hospital and medical dramas on television dupe the American public into dwelling on rare diseases. Each week you can see people dying of rare diseases, and then miraculously saved by Medical Science on these shows. All the medical shows I've seen on television have shown people with diseases so rare that I have *never* seen them in private practice, in medical school, or in hospitals where I have worked. The only contact I ever had with them was by reading about them in medical textbooks during my second year of medical school. What does it do to people who watch these shows? Probably they get a symptom such as a sore throat, and they know, from past experience, that it's a cold. They idle along with it for a while and if it doesn't get better in the time they think it should, the spector of the rare disease that they saw on television on the night before pops into their mind. *"Do I have multiple myeloma? Do I have fibrasomatosis? Do I have a strange, rare tumor of the respiratory system?* Soon the worry constricts blood vessels leading to that part of the body, changes the hormonal balance, changes the acid balance, the temperature, and lo and behold the little cold indirectly produces a perfect area for bacteria to grow.

The Marital Arts: Weaponry

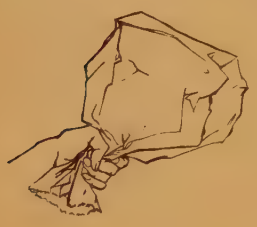
Dear Catalog People -

Since boffers first appeared in the catalog, through succeeding mentions here and there, at the Earth Games, etc. we have meant to write. They are a neat idea but we and many others are eating the $15 they cost. The following accomplishes the same thing. About fourteen years ago, Jack and I arrived home from work tired, frustrated, and full of aggressions and with two big sacks of groceries. In a mutually spontaneous mood, we put the groceries away, blew up the bags, and belabored each other's head vigorously and enthusiastically. After a few minutes' workout, we collapsed and had a drink, happy and pleased with ourselves.

Two sessions produced all the necessary refinements—— wear a garden or work glove or an oven mitt and take off your glasses. Once you protect the knuckles with a glove, you can't get hurt and the sensation and sound are very satisfactory.

Nice to hear you're back in business.

Angela de Celle
Fairfax, CA



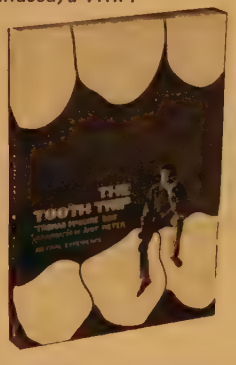
Cream Rises
MEDICAL

Behold Man *The inner body* **605**
Emergency Medical Guide *Serious emergencies, no doctor* **213**
Merck Manual *Reference* **214**
The Stress of Life *Classic on stress/health* **212**
First Aid *Everyday emergencies* **603**
The Well Body Book *Preventative home medicine* **603**
Donde No Hay Doctor *Minus doctor; in Spanish* **613**

The Tooth Trip

Dr. McGuire's book is an exhilarating and informative book about your teeth, gums and mouth. Exhilarating because of its charming, hip and humorous approach to a traditionally ignored subject. This is the first of the "how to" books about your teeth, and it often seems to turn people on. Several controversial chapters, one on flourides and the other about "the Dentist as a con artist" need to be interpreted cautiously. The cost of the book is reasonable if it has an impact on improving your home care and thereby reducing costly dental bills. The book is indeed, a TRIP.

—Daniel Phillips, D.D.S.
[Suggested by Annie Hines]



The Tooth Trip
(An Oral Experience)
Thomas McGuire, D.D.S.
1972; 233pp.
$3.95 postpaid
from:
Random House/Bookworks
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Healthy gums do not bleed. If your gums bleed when brushing or eating, they are *not*, I repeat, *not* normal or healthy. No matter what your friends say—— your teacher, your family or anyone else. Most people's gums have been bleeding for so long that they think that bleeding is either normal or inevitable. Well, it's damn well not!

•

Used properly, the water pick is the most far-out dental invention since the tooth brush. I have heard dentists say they don't like it, and others who say it harms the gums. Sure, anything can be harmful if abused, and the water pick is no exception.

Handbook of Non-Prescription Drugs

Handbook of Non-Prescription Drugs *first appeared in 1967 and is published by the American Pharmaceutical Association. Articles are excellent and written by practising pharmacists, professors of pharmacy, and researchers. The articles are well researched and loaded with information for both layman and physician.*

—R.D. Chamberlain, M.D.

Handbook of Non-Prescription Drugs
George B. Griffenhagen & Linda L. Hawkins, Eds.
1967, 1973; 202pp.
$7.50 postpaid
from:
American Pharmaceutical Association
2215 Constitution Ave. N.W.
Washington, DC 20037
or Whole Earth

Vitamins are used in therapy to pay back a debt. Their use is a placement rather than replacement therapy. The appearance of clinical indications for employing vitamins and related accessory food factors as drugs signifies that a serious breakdown has occurred in the orderly processes leading to proper nutrition.

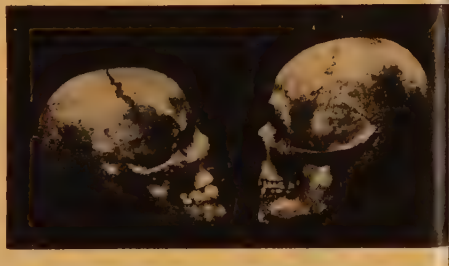
Behold Man

If health is aided by a good mental image of the LIVING body, this book is the best medicine you can stock; worth the $25. Nilsson has gone beyond his famous embryo photographs to the entire human organism—— cells, reproduction, blood vessels, lungs intestines, skin, brain, eyes and ears and more—— what a landscape. By comparison **Photographic Anatomy of the Human Body** *(Pg. 458) is strictly specimen work.*

Behold Man. *I wanted to put this book in our section on sex—— it's that sensual.*

—SB

The interior part of the heart.



Skulls of an adult woman and man

The woman's skull is on the left. The two skulls were four in a medieval graveyard on Froson near Ostersund, Sweden buried in earth for almost a thousand years.

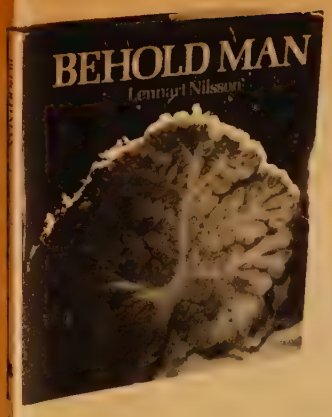
Male and female skulls differ in various ways. The male sk is often larger, has heavier brow ridges, a recessed root of t nose, and stronger muscular attachments.

The Headache Book

Written by a headache expert and a psychiatrist, wh discuss the kinds, associated symptoms, causes, and treatments. It is sufficiently up-to-date to include data on Acupuncture, bio-feedback, Zen, and prostoglandins. Directed at general readership and very well done in only 180 pages.

—R. D. Chamberlain, M.

The Headache Book
Arnold P. Friedman, M.D. & Shervert H. Frazier, Jr., M.D.
1973; 180pp.
$5.95 postpaid
from:
Dodd, Mead & Col, Inc.
79 Madison Ave.
New York, NY 10016
or Whole Earth



Behold Man
Lennart Nilsson
1973; 254pp.
$25.00 postpaid
from:
Little, Brown & Co.
200 West St.
Waltham, MA 02154
or Whole Earth

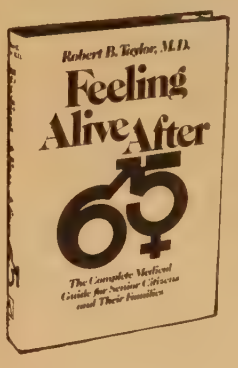
Ovary in a three-year-old girl.

Spermatozoa with long tails swarm around the ovum's surface. Magnified about 2000 times.

Feeling Alive After 65

Very well done, sensible book in lay language with lists of brand named non-prescription drugs. Discusses aging, diets, sex, certain ailments—— both organic and mental—— and gives things the persons themselves may do. By a dedicated practicing physician with much experience with senior citizens both in and out of hospitals and nursing homes.

—R.D. Chamberlain, M.D.



Feeling Alive After 65
Robert B. Taylor, M.D.
1973; 232pp.
$7.95 Postpaid
from:
Arlington House Publishers
81 Centre Ave.
New Rochelle, NY 10801
or Whole Earth

My diseases are an asthma and a dropsy, and what is less curable, seventy-five.

Samuel Johnson
(1709-1784)

•

Anxiety is a frightful feeling of ancitipation, usually with no specific cause, causing drenching sweats, dry mouth, pounding heartbeat, frightened eyes, and tremors of the hands and lips. The anxious patient appears fearful, but cannot pinpoint the cause of his apprehension.

In a sense, anxiety is an exaggeration of a normal reaction, caused by a release of adrenalin into the bloodstream, such as would occur in a dangerous situation. If you have ever had a near accident in an automobile and remember the tense and shaking feeling that immediately followed the experience, you know how the anxious patient feels at all times. The treatment of chronic anxiety involves scrupulous attention to good health measures, since anxiety will often occur in persons persons whose health is impaired for other reasons. Regularity is reassuring. The anxious person must live a well-organized life with three balanced meals daily, eight hours of sleep a night, and an adequate balance of work and relaxation.

•

Many women, whose sexual enjoyment had been clouded by the fear of unplanned pregnancy, have reached their full sexual fulfillment in their 50's, 60's and 70's. There is no reason why the mature woman cannot enjoy normal sexual relations until the late 70's. Regular sexual relations are important in maintaining the integrity of the vaginal tissues; a prolonged period of sexual abstinence, such as a year or two, will result in the formation of scar tissue around the walls of the vagina, and subsequent sexual relations may cause discomfort. Most men retain sexual potency into their 70's. Sexual potency is a measure of the man's confidence and self-esteem; the sexually active senior citizen will be the robust man who is vigorously engaged in hobbies, golf, and community activities.

COMMUNITY

t is likely that the pain of the hangover headache is related to, or in part (or indirectly) caused by, cranial vasodilation—— since, in our experience, vasocinstrictors (caffeine, for instance) help to counteract it. But it is also likely that there are other factors as well. Among the possibilities: fatigue, dehydration (whether via increased urination or because of sickness and vomiting) and concomitant blood-chemical imbalances, loss of sleep, smoke-filled rooms, and a multitude of psychological aftereffects—— perhaps including remorse.

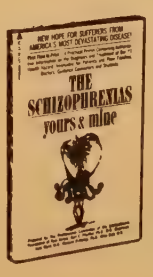
It would seem reasonable to prevent the problem by avoiding excessive drinking and, if an evening does involve drinking, by avoiding other factors that may play a part: lack of food, fatigue, emotional stress, and so forth. Should the morning dawn upon the painful syndrome, however, fluids, nutritious foods, caffeine (coffee or tea), aspirin, a cold shower, and—— perhaps most of all—— understanding company may help.

The proponents of marijuana-smoking, incidentally, claim as an advantage the lack of such morning-after phenomena. That's generally true if the amount smoked is minimal. But recent studies have shown that in large doses, marijuana is indeed capable of causing hangover.

The Schizophrenias, Yours & Mine

A pragmatic book which describes what is known about schizophrenia, how and where to get help, what kinds of therapies work and which don't. It is a primer intended for people who are concerned about the disease. Not exciting, graphic or gripping, but useful in its own right. *(Also see Pg. 211)*

—James Fadiman
[Suggested by Rosalind La Roche]



The Schizophrenias
(Yours and Mine)
Prepared & published by the Professional Committee of the Schizophrenia Foundation of New Jersey
1974; 158pp.
$1.25 postpaid
from:
Pyramid Publications
9 Garden St.
Moonachie, NJ 07074
or Whole Earth

Danger Signs of the Schizophrenias

1. Stereotyped or repetitive behavior.
2. Continued feelings of physical discomfort without cause.
3. Unnatural fears or unnatural grandiosity.
4. Failure to make friends and unnatural ability to alienate loved ones.
5. Unfounded suspicions or threats.
6. Profound insomnia, i.e., the ability of teenager to work or carouse all night.
7. Profound daytime fatigue or stuporlike sleep (he may go to bed when he comes home from school).
8. Continued angry excitement or temper tantrums in a teenager.
9. Complaints that voices are too loud or all lights are too bright.
10. Hallucinations
    (a) Hearing voices unnaturally.
    (b) Seeing visions unnaturally.
    (c) Smelling bad odors without cause.
11. Talk of suicide.
12. Announced sudden belief in the great truth phenomena, such as:
    (a) "God is Love."
    (b) "Love is the only thing that matters."
    (c) "My basic problems must be solved."

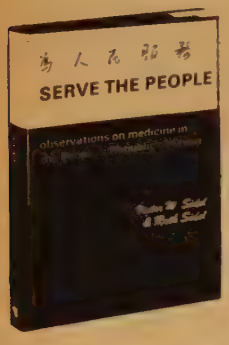
Note well: Single symptoms are not diagnostic; several of these signs must be present.

COMMUNITY

Serve the People

Best medical system in the world, thoroughly spelled out. Based on lengthy visits in 1971-72, here are reports of the barefoot rural doctors, the hospital referral system, mental health, acupuncture, government organization. American doctors and medical schools, the A.M.A., state legislatures, and any who would become paramedics have much to learn from the Chinese experience.

—SB



Serve the People
(Observations on medicine in the People's Republic of China)
Victor W. Sidel & Ruth Sidel
1973; 317pp.
$10.00 postpaid
from:
David White Co.
60 East 55th St.
New York, NY 10022
or Whole Earth

The Chinese characters usually translated as "self-reliance" are *tzu-li keng-sheng*—– more accurately translated as "regeneration through one's own efforts." Health services, and indeed all human services, are provided at the most local level at which they can possibly be given. What we in the West might call social or welfare services—– the care for a disabled older person or for the children of an ill mother—– are provided at the family or group level. Primary medical care is given at the residents' committee or lane level by Red Medical Workers. Each person, each family, each courtyard, each village is expected to do as much as it can for itself—– and to be transformed and strengthened by the process.

The decentralized health services function as well as they do, in our view, because they are part of a highly organized pattern that provides specific lines of authority and responsibility, and clear pathways of referral of patients to sources of secondary care and then back to sites of primary care. There appears to be a reasonable amount of supervision of the work of locally based facilities; and opportunity for local workers to receive advice and continuing education from more specialized personnel. Conversely, there are clear channels through which higher levels of organization receive reports and criticism from local levels.

•

In contrast to the pharmaceutical industry in a country such as the United States, with its high costs based on large research and advertising budgets and/or on high profits for the manufacturer, medicines in China are falling rapidly in price and are for the most part extremely inexpensive; in contrast to the industry of a country such as the Soviet Union, with its inefficiencies of production and distribution and periodic shortages, the industry in China appears to be extremely well-organized and productive; in contrast to other technology-poor countries that are dependent on wealthy countries for their supplies, the Chinese appear to be self-sufficient in most important items.

Health station, Sing Sing Production Brigade. Kao Ning-shin, brigade midwife, is seen on the right.

Acupuncture: Cure of Many Diseases

"Written for the layman," this book is an excellent general description of acupuncture and the uses thereof for both layman and practitioner. It is not a book from which eithe may learn how to practice acupuncture.

Dr. Felix Mann, a practitioner of medicine in London, is probably the most outstanding writer in English on the subject of acupuncture. He has practiced this modality in conjunction with his Western practice of medicine for 15-2 years. He studied under European Continental specialists this art; and researched the Chinese work deeply—– studyi the Chinese language in order to facilitate this. His books include not only this one for the layman, but four others primarily intended for the practitioner.

There are certain legal complications about the practice of acupuncture. This varies from state to state and is a matte of public law. In California, for example, a licensed M.D. may practice acupuncture in any setting. A layman acupuncturist may practice only under M.D. supervision in conjunction with a medical school acupuncture research project. A layman practicing acupuncture otherwise, whet it be for a fee or not, may be considered as practicing medicine without a license and be indicted accordingly.

—R.D. Chamberlain, M.D.

Acupuncture: Cure of Many Diseases
Dr. Felix Mann
1971; 121pp.
$2.25 postpaid
from:
Tao Books & Publications, Inc.
33 Farnsworth St.
Boston, MA 02210
or Whole Earth

Acupuncture and psychology

The blank space in the box represents Qi: it cannot be we or measured, for according to the ancient Chinese it is not material. Its effect, though, can be seen in the growth of a plant, the power of thought, the energy that activates any process. Much of this (though by no means all) can be explained in a different way via the materialistic laws of science. Insofar as it applies to acupuncture the flow of Q along meridians, would in modern medicine be described a an electrical impulse (depolarisation) travelling along a ner

Case history. I once saw a patient who was unable to stop talking (words-fire). The pulse diagnosis revealed an over-activity of the pulse of the heart (fire) and I therefore stimulated acupuncture point heart 7. Within a few minut the needle being in place the constant chatter stopped and the patient spoke normally for about a day when the incre flow of words started again. A repetition of similar treatm brought about a cure.

The American Journal of Chinese Medicine

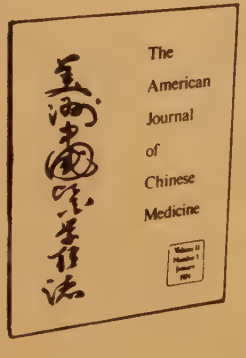
This quarterly is a professional journal directed at M.D.'s and others interested in acupuncture (both practice and research), Chinese herbology, cupping, and massage. It also publishes articles on the history of Chinese medicine and present-day achievements of Red Chinese medicine. It includes articles from any country where interesting activities along these lines are occurring.

It also reports abstracts of papers presented to World Symposia on Acupuncture and Chinese Medicine. The first two of these symposia were held in San Francisco, and this reviewer attended the first one. It was an excellent instructional effort covering several days and embodying papers from this country and Europe, training sessions, practical demonstrations, and panel discussions.

The Journal also produces educational films, and makes available up-to-date charts and other educational materials.

—R.D. Chamberlain, M.D.

The American Journal of Chinese Medicine
F. Kao, M.D., Ph.D., Ed.
$25 /yr., quarterly
$15 /yr., students (with proof)
$7.50 /single copy
from:
American Journal of Chinese Medicine, Inc.
Box 555
Garden City, NY 11530



Illustrations of how the needle should be held in performing veterinary acupuncture.

A young peasant woman who lost both feet in an accident can now walk with one transplanted foot of her own plus an artificial leg, thanks to a successful operation by surgeons of two Peking hospitals. The right foot, severed from the smashed right lower leg, was transplanted to her left leg below the ankle. After nine months of treatment, the patient can now walk up and down the stairs and stroll in the park.

•

Homeopathy

Medical aikido. Instead of fighting the disease as in standard Western "allopathic" treatment, homeopathy increases the ailment symptoms, goes with them, presumably aiding the body to build its own defense. This is the only book, a general intro at that, on the subject. Who can tell us more on how to find and do homeopathic treatment and how well it works?

—SB
[Suggested by Sam Shambhala]

Homeopathy
(Medicine of the New Man)
George Vithoulkas
1971; 117pp.
$1.25 postpaid
from:
Avon Books
250 West 55th St.
Order Dept, 8th Flr.
New York, NY 10019
or Whole Earth

A remedy cures a disease only because it produces similar symptoms in a healthy organism! The whole of homeopathy derives from this law; in it resides the revolutionary breakthrough to a wholly new dimension in the understanding of medicine.

•

Homoeopathic Pharmacies
(where books listed in Bibliography may be obtained)

Humphrey's Medicine Co., Inc.
63 Meadow Rd.
Rutherford, NJ

Ehrhart and Karl Inc.
17 N. Wabash Ave.
Chicago, IL

Luyties Pharmacal Co.
4200 Laclede Ave.
St. Louis, MO

Homoeopathic Societies

American Board of Homoeotherapeutics

President,
Henry W. Eisfelder, M.D.
P.O. Box 1146
Vero Beach, FL 32960

Secretary,
William Boyson, M.D.
309 S. Market St.
Mechanicsburg, PA 17055

Acupuncture: A Selected Bibliography

This bibliographic series is designed to serve as a useful too for those wishing a general introduction to the English language literature concerning acupuncture and for researc engaged in the evaluation of this ancient medical art. It includes citations concerning the history of acupuncture, traditional and contemporary theories, current research studies and texts describing practical applications of this intriguing technique. . . Most of the citations have been annotated so that the readers can efficiently select articles in accord with their primary interests. Volume 2 will contain references to books and articles published during 1973 and will be available from the Association early in 1974.

—John White

Acupuncture: A Selected Bibliography, Vol. 1: 1800-1972
David E. Bressler & Patricia Wisne
1973; 129pp.
$10.00 /individuals
$15.00 /institutions
$7.50 /NAA members & students
from:
National Acupuncture Assn
1033 Gayley Ave.
Suite 200
Los Angeles, CA 90024

ome Men are More Perfect Than Others

t first this book might turn you off—— looking like string of platitudes about love, sex and marriage. . . t it ends up reading like a conversation with your- lf: signifying thoughts that were always there. A affirmation of life that goes nicely on a lonely ight or with your mate.

—Andrea Sharp

Some Men Are More Perfect Than Others
Merle Shain
1974; 128pp.
$1.50 postpaid
from:
Bantam Books
665 Fifth Ave.
New York, NY 10019
or Whole Earth

en are taught that women respect them for their strength nd that may well be true, but they love them for their ulnerability and men with tragic flaws are often loved the ost of all. Vulnerability is so seductive that some men arn to feign it, but that is not the same. Henry Miller rote of a young man who came to him for advice claiming e had persuaded the woman he was trying to win to take ff all her clothes but then she would go no further. And hen he asked what he did wrong, Miller turned to him and id, "You forgot to weep."

•

irls gave sex to get love and boys gave love to get sex and nning girls was the favorite indoor sport.

•

ood marriages seem to function something like a buddy stem—— the people in them swim in their own waters but eep a protective eye on each other, and should the whistle low, turn up quickly to hold each other's hand. It's more portant today than ever before to know what your iorities are because life links us with more people than ur hearts can hold, so men who know what they will to the wall for, as well as for whom, are the ones whom is nicest to be married to, presuming you're the one they ave at the top of their list.

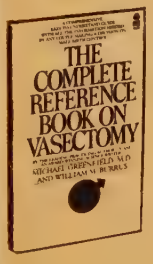
•

one of the problems of marriage is that safety can lead to mplacency, then one of the advantages of being single is at one is never safe enough to grow complacent, and nstantly having to prove oneself often leads to growth.

The Complete Reference Book on Vasectomy

he what, why, how, of male sterilization. Pros and ons approached rationally. Very long bibliography nd directory of clinics and hospitals currently erforming vasectomies.

—DB



The Complete Reference Book on Vasectomy
Michael Greenfield, M.D.
& William M. Burrus
1973; 253pp.
$1.65 postpaid
from:
Avon Books
250 West 55th St.
Order Dept, 8th Fl.
New York, NY 10019
or Whole Earth

n family planning, one of the biggest bargains is a sectomy since it requires no further attention once the an's semen has been determined to be free of sperm. Even eyond the health and aesthetic drawbacks that have driven ouples from the condom, the diaphragm, the IUD, the oams and gels, and the Pill—— these preventive devices ll require ongoing purchases and/or visits to the doctor or the duration of your birth-control years. For the rhythm ethod, one has to include the cost in peace of mind since he partners know they are running a bigger risk of having hildren this way than with other methods.

he cost of a vasectomy performed by a private doctor anges from one hundred twenty-five to two-hundred fifty ollars or perhaps a little more in a few large cities. This ee frequently includes a pre-vasectomy counseling visit ith both the man and his wife, plus postoperative semen hecks for sperm.

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THE CANNULA ABORTION

by Stephanie Mills

Abortion is the commonest method of birth control in the world. It has also been the most dangerous, whether performed by physicians in hospitals with conventional instruments or induced by back country midwives with sticks. Women have risked and lost their lives terminating unwanted pregnancies since time began.

A recently accepted technique may change all that.

The accepted medical practice for abortion, dilation and curettage, subjects women to cervical laceration, uterine perforation, hemorrhage, and death. It involves dilation of the cervix by steel rods of increasing size. This procedure is quite painful, and may require general anaesthesia, which increases the risk to life. The cervix is "stabilized" by being held with toothed tenacula while the womb is scraped with a steel curette. It is incredibly bad design which attempts to make the uterus conform to the instruments and procedure they require.

The Karman cannula is a narrow, blunt, flexible plastic tube, closed at the end and notched. (See illustration.) Attached to any vacuum-creating apparatus it effects a suction abortion in about two minutes. Since the cannula is blunt and soft, the risk of uterine perforation is virtually nil. Suction and gentle scraping of the uterus with the cannula seem to result in far less bleeding after the abortion.

The cannula method is fast and (potentially) cheap enough to be used when a pregnancy is suspected, but cannot yet be confirmed by a test. In such very early abortions, the smallest available cannula (4mm) can be used, and no dilation of the cervix is necessary. In abortions requiring the use of a larger bore cannula, smaller cannulae may be used as dilators.

Karman has devised a syringe for use with the cannula which incorporates a couple of features for maintaining a fail safe vacuum. (However, one Dr. consulted about the kit felt that the syringe is pretty flimsy.) A kit consisting of a syringe, speculum and a number of cannulae of various sizes will be distributed by several international groups. A program is being set up to train paramedics in its use. It can be expected that the device will eventually

filter back to midwives and may, in time save millions of women's lives.

The no-touch technique for using the cannula minimizes the risk of infection. A sterile cannula is inserted directly into the uterus without coming into contact with the walls of the vagina (which are obviously not sterile).

The cannula and syringe are prescription items, and are not for unskilled use. That doesn't mean that it takes a doctor to perform a cannula abortion, but it does mean that anyone attempting one had better have some training.

Further information on this technique is available from the National Women's Health Coalition, 222 E. 35th St., New York, NY 10016.

•

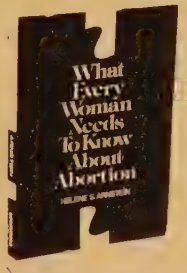
Stephanie Mills is a writer and director of Planned Parenthood who suffered an early fame in 1969 with a valedictory address to her graduating class at Mills College which announced that she, personally, was going to have no babies. The Energy Crisis after all, and the Food Crises to come, are really Customer Crises. Too many users. "Cannula" is pronounced CAN-ewla.

—SB

What Every Woman Needs To Know About Abortion

Written specifically for the woman who is considering an abortion, it seems the best of the rash of new books on the subject. By far the most complete and accurate on what to expect emotionally, respectful of an individual but not isolated decision. Covers legal, medical, relationship aspects; aftercare, contraception, alternatives, helpful agencies.

—DB



What Every Woman Needs to Know About Abortion
Helen S. Arnstein
1973; 144pp.
$2.45 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

In order to avoid delay in finding the safest and best facilities for an abortion and in finding counseling help if it is needed in reaching a decision, I strongly recommend that a woman who is considering an abortion get in touch with either of two noncommercial agencies: The Planned Parenthood Federation of America or the National Clergy Consultation Service on Abortion. Both provide consultation and referral services free of charge.

The Planned Parenthood Federation has affiliates in forty-two states and the District of Columbia and is constantly opening new branches. Several of its affiliates are now offering early-abortion services. Check your local telephone directory or that of the nearest large city to find whether there is an affiliate near your home. Should there not be, telephone at once to the national headquarters (address and telephone number in the following list) and ask to be referred to the nearest affiliate.

The National Clergy Consultation Service on Abortion is a group of more than two thousand concerned members of the clergy—— ministers and rabbis in many states, who know the ropes and can shepherd you safely through an abortion. When you call the national office (see following list), you will hear a recording giving the telephone numbers of all branches in the United States. Then call the nearest one and you will be given assistance. . . . *Do not contact a commercial abortion-referral agency.* . . . The National Clergy Consultation Service on Abortion, 55 Washington Square South, New York, NY 10012. (212) 477-0034. Will supply counseling and help on any problem related to unwanted pregnancy; see previous discussion.

Planned Parenthood Federation of America, Inc., 810 Seventh Avenue, New York, NY 10019. (212) 541-7800. Telephone or write for the name of the affiliate nearest you (see previous discussion). The national office will send booklets on contraceptive methods on request, and local branches also give advice on contraception.

•

Concern for the unwanted child. One of the most fundamental and crucial issues of all is the position of the *truly* unwanted child. Cases of child neglect, of the battered and abused child, are on the increase. Emotionally neglected children are being raised in rich and poor homes that are not really homes at all. Unwanted children fill not only our foster homes and orphanages during their growing years but often our jails and mental hospitals during their adulthood. An unwanted child is deprived of his birthright: motherly devotion and the tender, loving care of at least one parent. And this nurturing is a must if he is to become a mature human being and a responsible citizen. Motherhood now can be a matter of choice, not of calamity. The Group for the Advancement of Psychiatry has stated in the report already quoted: "There can be nothing more destructive to a child's spirit than being unwanted, and there are few things as disruptive to a woman's spirit than being forced into motherhood without love or need."

A much better and more peaceful world may be possible if every child born into it is planned for, wanted, and loved.

C-Film

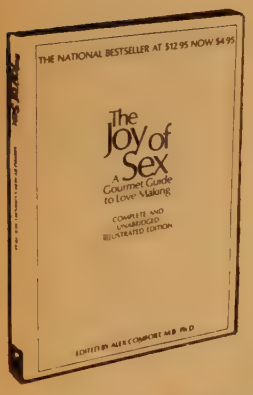
Contraceptive simplicity: slip this little item into the vagina or drape it on the penis-tip before intercourse and you get effectiveness equivalent to vaginal foam—— cheaper and easier. Now being introduced in England, originated in Hungary, C-Film is available nowhere in the U.S. For sample C-Film, send $2 to Lloyd's Surgical Department Limited, Commercial Road, Portsmouth, Hampshire, England.

[Sent by Stephanie Mills]

The Joy of Sex

If a book is judged on how profoundly it affects people's lives, and how many lives it reaches, this book is one of the all time greats. You can't read it without trying some of the ideas in it, and those lead to others, and human relations grow steadily warmer. In the writing, the content, and the illustrations, warmth is what the book is about. And imagination, and variety. Contact. Health. The sequel, **More Joy**, *looks to be even better.*

–SB



The Joy of Sex
(A Gourmet Guide to Love Making)
Alex Comfort
1972; 254pp.
$4.95 postpaid
from:
Simon & Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

More Joy
Alex Comfort
1974
$12.95 postpaid
from:
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth

Women (by her for him)

Women, like men, have direct physical responses, sure, but these *are* different (breasts and skin first, please, not a direct grab at the clitoris) and can't be short-circuited. It matters to them who is doing what, far more than it does to most men. The fact that, unlike you, we can't be visibly turned off and lose erection often confuses men into hurrying things or missing major resources. It isn't true that nudity, erotica, etc., don't excite women–– probably the difference is that they aren't overriding things. Is it fair, I wonder, to give a simple instance? You can make orgiastically satisfactory love with a near stranger in half an hour flat. But please don't think for that reason that you can do the same for a woman who loves you personally if at the end of the half-hour you put her into a taxi with a bunch of roses and go off to a wife. Granted this, however, there are common reactions.

We seem to be less heavily programmed than you for specific turn-ons, but once we see one of these working on a man we care about, we soon program it into our own response, and can be less rigid and more experimental *because* of this ability. Often if women seem underactive it's because they're scared of doing the wrong thing with that particular man, like touching up his penis when in fact he's trying not to ejaculate–– *tell* us if you see us at a loss. The penis isn't a 'weapon' for us so much as a shared possession, rather like a child–– it's less the size than its personality, unpredictable movements, and moods which make up the turn-on (which is why rubber dummies are so sickening). Another important thing is the tough-tender mixture: obviously strength is a turn-on, but clumsiness (elbows in eyes, twisted fingers, etc.) is the dead opposite. . . . As to the Women's Lib bit, nobody can possibly be a good lover–– or a whole man–– if he doesn't regard women as (a) people and (b) equals. That is really all there is to be said.

Our sense of smell is the keener–– don't oversaturate early on with masculine odors; just before orgasm is probably the time for full odor contact. Our own smell excites us as well as yours.

The sort of hand and mouth-work which men like varies enormously. Some like it very rough, some hate it anything but extremely gentle, others in between. There is no way for a woman to tell except by asking and being told–– so it's up to the man to say what he likes or he may get the opposite.

Some men are extraordinarily passive, or unimaginative, or inhibited, and–– oddly–– when they are any of these things, we do not become correspondingly aggressive. We may long to do things and feel thoroughly frustrated, but we don't dare show it in most cases. So a woman's love-making will only be good with a good lover and, more important, she will resent any man who is unexciting, not only because it is unexciting but also because she will know she has been unexciting too.

Finally, just as all women are more alike to a man than all men are to a woman, women probably really do differ sexually rather more than men, because of the greater complexity of their sexual apparatus (breasts, skin and so on as well as pussy). Never assume you don't need to relearn for each person. This is true for women with a new man, but perhaps a little less so.

•

However much sex you have, you will still need simple, own-hand masturbation–– not only during periods of separation, but simply when you feel like another orgasm. Some women feel left out if they find their partner masturbating, but if you feel vibrations when he thinks you are asleep and want to get in on the act, tackle him there and then and finish him yourself at full speed–– or better, start on him slow-style then stop, tie him, and make him watch you masturbate yourself, slowly and with style, before you put him out of his misery. The unexpected sight of a woman giving herself an orgasm when he cannot move is unbearably exciting for most men. Make sure he can't get loose. Finally, watching each other take the last orgasm separately but together makes a wonderful end to any afternoon in bed.

•

The quickie is the equivalent of inspiration, and you should let it strike lightning fashion, any time and almost anywhere, from bed in the middle of the night to halfway up a spiral stair: anywhere that you're suddenly alone and the inspiration is bilateral. Not that one or the other won't sometimes specifically ask, but the inspirational quickie is mutual, and half the fun is that the preliminary communication is wordless between real lovers. The rule is never to resist this linkup if it's at all possible–– with quickness, wit and skill it usually is. This means proficiency in handling sitting, standing and other postures, and making love without undressing. The ideal quickie position, the nude matrimonial, will often be out. This may mean on a chair, against a tree, in a washroom. If you have to wait and can go straight home, it will keep up to half an hour. Longer than that and it's a new occasion. Around the house, try not to block, even if you *are* busy.

•

Bondage

Bondage, or as the French call it, ligottage, is the gentle art of tying up your sex partner–– not to overcome reluctance but to boost orgasm. It's one unscheduled sex technique which a lot of people find extremely exciting but are scared to try, and a venerable human resource for increasing sexual feeling, partly because it's a harmless expression of sexual aggression–– something we badly need, our culture being very up-tight about it–– and still more because of its physical effects: a slow orgasm when unable to move is a mind-blowing experience for anyone not too frightened of their own aggressive self to try it.

•

Feathers

Recommended by some for skin stimulation (breasts, body surface generally, rather than the actual genitals, and palms and soles.) Try stiff wiry ones (heron or egret) or an old-fashioned feather mop.

Sexual Honesty

I believe this book has found its way to the very center of interest in sex books: What do other people do?–– details please. Textbooks, including **The Joy of Sex**, *try to generalize satisfaction for everybody. Kinsey found, and Shere Hite proves, that wild variety throbs in American bedrooms. Furthermore immeasurable human unhappiness goes with painting oneself into a sexual corner. The out is sexual honesty. Start with this exciting book.*

NOTE: Shere Hite now has two questionnaires going–– one for men and a new one–– more elaborate than before–– for women. We printed both in the Summer '74 **CoEvolution Quarterly** *(Pg.* **451***) so that readers might participate in Ms. Hite's study. Or–– for aphrodisiac–– fill out the questionnaire and swap answers with a friend.*

–SB

[Suggested by Bill Barich]

I think that very few men that I have known are as informe about my sexual desires and about my body as they could should be. Even my husband is very uninformed. I think women can and ought to know more about their bodies and their sexuality. If they did, maybe more men would.

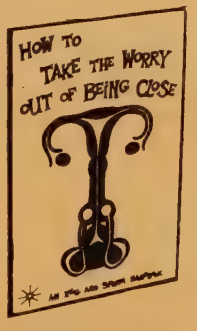
•

If it's one of those nights when I just want EVERYTHING in me, we get into a missionary position where he has his penis in my vagina, and I have room to play with the clitor and then we put the vibrator in my anus. Wow! Blows my mind!

How to Take the Worry Out of Being Close

Excellent cheap cheerful thorough pamphlet on all the contraceptive techniques.

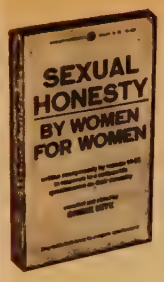
–SB



How to Take the Worry Out of Being Close
Marian Johnson Gray and Roger W. Gray
1971; 32pp.
$ .50 postpaid
from:
Box 2822
Oakland, CA 94618

Advantages of the condom – It gives the male responsibili It offers some protection against veneral disease. It is easil acquired at most drugstores–– availability can be just as important as effectiveness.

Disadvantages of the condom–– Foreplay must be interrupted to put on the condom. But since you're probabl playing in that general area anyway, ladies, why not make part of the play? Some men feel that use of the condom dulls sensation. And some women may not care for the feel of a rubber penis; others enjoy being flooded with the male's vital bodily fluids.



Sexual Honesty
(By Women For Women)
Compiled and edited by Shere Hite
1974; 294pp.
$1.50 postpaid
from:
Warner Paperback Library
Trade Sales Division
Independent News Company
75 Rockefeller Plaza
New York, NY 10019
or Whole Earth

The price at bookstores is $1.50, but if you cannot afford this, please write me for a copy. Bulk orders are available to women's groups at a 50% discount.

My hope is that these books will serve as forums for sharing our information and feelings, and for gradually building up an honest, collective and woman-defined picture of female sexuality and culture.

Shere Hite
c/o NOW New York
47 East 19 St.
New York, NY
10003

6. When I masturbate I never have any trouble coming but I did have to learn to masturbate. It's worth noting that I was 29 when I started—— I had tried once before but hadn't been successful. I didn't know what the clitoris was for! Sex education for girls should include masturbation along with all the other "facts of life"! During intercourse I have to be in the mood, not uptight, then I can usually come.

7. That just depends on so many factors. Sometimes I would like to go on after my man has come. Occasionally I'll masturbate but usually I repress it until the next day when I can masturbate alone. I still feel somewhat selfconscious when he's there, although I feel I should overcome that. During masturbation I guess I come about a dozen times.

•

40. I would like to try having sex outside in a setting like the warm, luxuriant garden I mentioned before, and I would like to spend a whole day with my husband having prolonged and repeated sex. I would like to have sex more often than we do now, and I would like the part before intercourse to last longer. I would like to change our bedroom scene so that my husband would treat sex in a less routine way.

•

41. My first lesbian experience was incredibly electrifying—— and a brief affair I had later with a woman who was an unbelievably tender and romantic lover. Also Susan!

42. With myself—— I was 18 or 19 (clitoral stimulation). With a man, age 16, close body contact. My first orgasm, age 26, during heterosexual intercourse. With a woman, mutual masturbation, age 28.

I guess I looked at my vagina and genitals as carefully as I could at about 26 or 27. (I went to Catholic schools and was raised in the 50's—— the Great American Repression.)

The Atlas of Sexual Pleasures

Far the best photographic sex book. Entirely in color —— good quality at that—— full range of bodily details and human practices, and charming models (German). People seize this book and don't put it down till they've checked clear through it. Good for all ages; I imagine the curious young would gain the most from having one around.

—SB

The Atlas of Sexual Pleasures
(Acts, Practices & Deviations)
Gunther Hunold
1972; 173pp.
$9.95 postpaid
from:
Medco Photo-Books
1640 S. La Cienega Blvd.
Los Angeles, CA 90035
or Whole Earth

HUMAN SEXUALITY

by Michael Phillips

Dr. Kinsey and the Institute for Sex Research—— Wardell B. Pomeroy; Signet J5354-$1.95.

Dr. Alfred Kinsey, a genius, who's life story is fascinating as a mirror of the American experience in sex. A 20th century controversy as violent as Darwin's. A man who's research is still accurate and fundamental 25 years later because he did the *field work* himself (10,000 personal interviews with every segment of society). He was a great scientist in an unexplored world; he said "a nymphomaniac is a person who has more sex than you do."

The important thing is that few people would have believed, before our Report, that a third of American males had had at least one homosexual experience.

3. Individual variations. When we talk about variation among individuals, we mean something like the difference between 1 to 4, or 6 to 20. The smallest person in our society, for example, might be twenty-five inches high, and the tallest eight feet, or a variation of 1 to 10. Again, penis size may vary from the smallest, one inch, to the longest, ten inches. This is the normal kind of range. But in sex behavior, because there are so many variables involved, the range can be from 1 to 10,000. People have difficulty understanding this fact. For example, roughly 10 percent of women never have orgasm, but it is possible for a woman to have 50 to 75 orgasms in twenty minutes. The range is tremendous.

When those of us doing the research became accustomed to the idea of this range, we were exceedingly frustrated as we realized how few people could accept it.

The Report of the Commission on Obscenity and Pornography— Bantam. DZ 6512— $1.65.

The President disowned this authoritative study; because it has some interesting facts: Pornography is good.

Several recent studies suggest that traditional hypotheses of gender differences in psychosexual responses may require revision. These studies indicate that while males tend to judge erotic stimuli as more arousing than females, the sexes do not differ substantially in physiological-sexual response to these stimuli. Not surprisingly, research indicates that females are less responsive to male-oriented erotica, but about equally responsive to heterosexual action themes. Differences in psycho-sexual response between the sexes appear to be essentially qualitative, rather than quantitative.

Studies show that exposure to erotic stimuli may also temporarily increase the frequencies of erotic dreams and sexual fantasy, particularly among unmarried persons, and may increase conversation about sexual matters among both married and unmarried persons. Studies of married couples' responses to erotic stimuli found that after exposure, husbands and wives reported more agreeable and "increased openness" in marital communication.

Understanding Human Sexual Inadequacy—— Fred Bellivean and Tim Richter—— Bantam Q245959, $1.25.

An authorized version of Masters and Johnson's work; clear guide to major findings in treating sexual dysfunctions.

They define premature ejaculation as inability to delay ejaculation long enough for the woman to have orgasm fifty percent of the time. If the female is not able to have orgasm for reasons other than the rapid ejaculation of her partner, this definition does not apply. Other therapists define premature ejaculation as inability to delay ejaculation for thirty seconds to a minute after the penis is in the vagina.

Until **Human Sexual Response** was published in 1966, there were no large-scale observations of the female's physiologic response to sexual stimulation and her capability of having orgasm. These studies, which demonstrated the sexual capacity of women, added to Masters and Johnson's contact with women in treatment of sexual problems, have shown them clearly the role of our culture in inhibiting female sexuality. Their comment on the situation is too startling to repeat in any but their own words.

> Yet, woman's conscious denial of biophysical capacity rarely is a completely successful venture, for her physiological capacity for sexual response infinitely surpasses that of man. Indeed, her significantly greater susceptibility to negatively based psychosocial influences may imply the existence of a natural state of psycho-sexual-social balance between the sexes that has been culturally established (italics added) to neutralize woman's biophysical superiority.

A man in good health, who has a partner in whom he is interested and who is interested in him, should enjoy an active sex life even in his eighties.

Ignorance is one of the greatest deterrents to effective sexual functioning at all ages, but it has been most damaging to the aging.

Masters and Johnson explain to older people that they must allow nature a little more time to take her course. If a man stops trying to will an erection, but just lets it happen naturally, he will continue to be potent. Instructions given to aging couples also include techniques of stimulating foreplay . The wife is made to understand that she should not interpret the slower responses of her husband as evidence that he does not find her attractive anymore. Instead, both are encouraged by the therapists to learn to enjoy the longer period of foreplay. In addition, the wife can learn the skill of inserting the penis when it is not fully erect, knowing that the first few thrusts will add the necessary stimulation to get full erection.

Because of lessened ejaculatory demand and better ejaculatory control, a man, often for the first time in his life, finds it easy to satisfy a wife whose responses were always slower than his. The wife now has the opportunity to feel sexual in a way that she never had before. The husband really has become a better lover.

The most important change for older couples to be aware of, however, is that as he ages the older man definitely has less <u>need</u> to ejaculate.

"YES" Books $1.95 each, from: Multi Media Resource Ctr., 540 Powell St., San Francisco, CA 94102.

The authoritative do it yourself guides—— with photos.

1. "You Can Last Longer" — End premature ejaculation.
2. "Female Self-Pleasuring" — Toward full orgasm.
3. "Female Homosexuality" — How to.
4. "Male Homosexuality" — how to.
5. "Male Self-Pleasuring"—— End secondary impotence.

Getting in Touch

You Can Last Longer

SUCCESS IN CONTROLLING EJACULATION

What it takes to make it work:

Both partners have to want to work together.
Both partners have to take the time to work on it.
Both partners have to put off immediate gratification in order to have long range gratification.
Both partners have to be willing to bare themselves to each other.
Both partners have to stick with it.

•

International Museum of Erotic Art - 540 Powell, San Francisco.

The best public resource; touring shows, worth seeing.

For People Who Make Love

Best book on VD we've seen. It seems that two major responsibilities go along with an active sex life—— making no unwanted babies, and spreading no unwelcome contagion. The first if gradually improving. This book and a little care can fix the second.

—SB

For People Who Make Love: A Guide to Sexual Health
John J. Secondi, M.D.
1974; 190pp.
$1.50 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Gonorrhea is the number one reportable infectious disease in the U.S. today. It is the main reason this book is being written. *Over two million people will develop gonorrhea in this country this year, and many of them will not know it unless they look for it.* When they say we're in an epidemic of it, they're not kidding.

•

Getting physicians to prescribe the adequate dose is not a simple thing. A study in Oregon not published as yet shows that half of the private physicians in America gave inadequate therapy even before the increase in dosage recommendations! That is why *you are better off going to public health clinics or VD clinics where they know their business.*

•

Q *Does taking The Pill make you more susceptible to some kinds of VD?*

A Yes! This fact is little known. The Pill contains steriods that are not the ones your body would make normally. Steroids always alter the internal environment and tend to make infection much easier to take hold, and more difficult to eradicate. Women on The Pill have a much higher rate of trichomonal and monilial vaginal infections. These are protozoan and fungal forms, respectively, and the environment of the vagina (acidity, etc.) is changed with the Pill so that they flourish. Millions of women have these irritating vaginal diseases for years without knowing it.

Lesbian/Woman

Warm personal account of two Lesbian Women who have dedicated their lives so that women may be free to love other women. Dedicated to the Daughters of Bilitis—— and to all the other daughters throughout the world who are struggling with their identity as Lesbian/Woman.

—Salli Rasberry

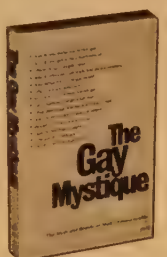
Lesbian/Woman
Del Martin and
Phyllis Lyon
1972; 310pp.
$1.50 postpaid
from:
Bantam Books
666 Fifth Ave.
New York, NY 10019
or Whole Earth

The three most common techniques used in Lesbian lovemaking are mutual masturbation, cunnilingus and tribadism. Mutual masturbation consists of manipulation of the clitoris, caressing the labia, and/or penetration of the vagina by the fingers until sexual excitation or orgasm occurs. This can be done simultaneously by the partners or in turn. Cunnilingus is the stimulation of the clitoris, the labia, and sometimes penetration of the vagina by the tongue of the partner. Again, this can be done by one to the other or, in the "69" position, by both at the same time. Tribadism, on the other hand, involves one woman lying atop the other, followed by up and down rhythmic movements to stimulate the clitoris of each. It is a technique which may fulfill "butch-femme" fantasies, but which takes time to master. There may be variations of position, but satisfaction comes from stimulation of the clitoris by the friction of movement against the body of the partner.

The Gay Mystique

Should Your Son Marry a Homosexual? Does America need a gay President? A glimpse into a subculture exploding myth after myth about male homosexuality.

—Salli Rasberry



The Gay Mystique
Peter Fisher
1972; 258pp.
$1.95 postpaid
from:
Stein and Day, Inc.
Scarborough House
Briarcliff Manor, NJ
10510
or Whole Earth

I found myself developing a strong crush on a close friend but didn't know whether my feelings were reciprocated. There was a charged feeling in the air when we were together; when we touched, it was electrical. But did he feel the same things? I didn't dare make a move. . . .

Before long, we were under the covers together making love. He fell asleep afterward and I lay there for an hour or so watching the afternoon sunlight fall on his face, looking at the beautiful lines of his eyebrows, his mouth, his cheek, watching him breathe. It was a moment to hold and cherish, never to be forgotten.

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For some people, S&M sex seems to serve as a pleasurable form of sexual psychodrama.

The S&M scene has other seldom recognized positive features. Generally viewed as cruel and brutal, S&M sex is often based on a greater degree of trust and tenderness than more conventional sex.

MAIL ORDER PORN

by John Milton

Screw Magazine

There are hundreds of sources for mail order pornography. Most of them (ninety percent) are either unreliable or just plain crooked. There are, however, a few simple rules to follow if you are buying from an advertisement which will keep your losses to a minimum. Most important of these is, don't send cash. Keep your initial order low—— say $15.00—— until you see if the firm delivers. And finally, don't expect something for nothing. If a firm offers what looks like a fabulous deal at a ridiculously low price, they're crooked nine times out of ten.

What follows is a list of mail order porno businesses which have proven themselves to be honest over the years. However, because this field is constantly changing, even they should be approached using the above listed guide lines. The warning caveat emptor could not be more aptly applied to any area of American business.

Quality Enterprises
340 Jones Street
San Francisco, CA 94102

Somewhat higher prices, somewhat slower delivery than Ritro, but reliable.

M.K. Enterprises
Sta. C
P.O. Box 1132
Canton, OH 44708

A new, small outfit with good films, low prices, and speedy delivery.

Dunn Management Co.
Suite 507
516 Fifth Ave.
New York, NY 10036

Dunn handles gadgets, jewelry, a large back-list of porno films, and has recently added to its stock the Danish Lasse Braun films, the best home porno on the market.

Ritro Enterprises
Box 197
Paramount, CA 90723

Ritro boasts a broad selection of everything from Linda Lovelace films to water sports. They deliver within a week, and offer discounts on large orders.

Krow Enterprises
Suite 107
6697 Northwest Hwy.
Chicago, IL 60631

Again, a new, small firm, but low-priced and reliable. Krow's usual delivery time is one week, and it offers a "potluck" special—— a good film bought blind—— at the bargain price of $12.00

Joy Products
Box 7047
Johnston, RI 02919

Joy has recently become the largest supplier of s-m goods on the east coast.

Bob Anthony
701 7th Ave.
New York, NY 10032

Anthony has a large stock, and is a good source for gay material.

United Sales Company
152 W. 42nd St.
Suite 504
New York, NY 10036

Note: porno films come in regular eight or super eight, and most of them are in color. The four most famous series among porn film buffs are Color Climax, Pretty Girl, Blue Movie, and Lasse Braun. Films sell for anywhere from $15 -$18 to $30, although most firms offer discounts for quantity buying. The same film will often be on the market at very different prices, so it's best to shop around by asking each company for a catalogue, which they will send for a nominal fee. Reasonable delivery time is from four to six weeks, although some of the companies listed will get an order to you in a week. This also applies to magazines, books, and gadgets (vibrators, etc.).

Screw

Humorous, intelligent, and abundantly randy, Screw *prov much-needed evaluation and exploration in the sexual entertainment business—— from feature-length dirty movi to massage parlors, meat magazines, and sexual toys.*

—SB

Screw
Al Goldstein, Ed.
11 issues/$9.95 or
26 issues/$17.00
from:
Milky Way Productions,
Subscription Dept.
P.O. Box 432
Old Chelsea Station
New York, NY 10011

Bitch: What do you like him to do when you're coming?
Rhonda: Fast strokes.
Darlene: I like to have my clit sucked. There's nothing li that in the world.
Lorraine: Sometimes I'll push the guy away when I'm coming and just go off by myself. Not into another room, just with my legs together.
Rhonda: Sometimes I start humping his leg. I wrap my l around his thigh really tight. First I'll push him away, then wrap my legs around his leg while I'm coming. It fee like a big dick.
Bitch: At that point a lot of things can. The air itself, fo instance.
Rhonda: Only on a very smoggy day.

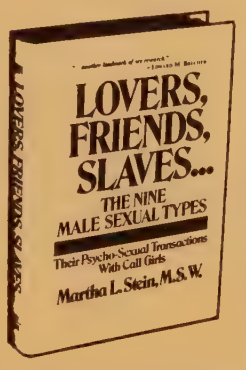
Lovers, Friends, Slaves

The book is the result of covertly observing and recording interactions of 1,242 men with New York Call Girls. The title words, "Lovers, Friends and Slaves," describe three o of nine male role behavior patterns that Ms. Stein identifi during her research.

Ms. Stein begins the book with a wonderful description o metamorphosis from curious social worker (she has an M.S to knowledgeable researcher who can understand and deal with sexual experiences. This part is well done, honest, an hopefully will make the whole book more valid for the la reader.

A major reason for the importance of this book is that it i based on observations of the clients of call girls! The resu is a strong, much needed statement about the extraordinar role of the call girl as therapist.

—Mike Phillips



Lovers, Friends, Slav
(The Nine Male Sexual Types: Their Psycho-Sexual Transactions wit Call Girls)
Martha L. Stein, M.S.W.
1974; 327pp.
$8.95 postpaid
from:
Berkeley Pub. Corp.
G.P. Putnam's Sons
200 Madison Ave.
New York, NY 10016
or Whole Earth

When they got into bed, the call girl would wait to see if t client would take the lead. Forty-nine percent of the men remained passive, preferring to have the call girl direct the activities. She would begin by trying to establish the clien erotic zones, first licking his ear lobes, then moving her tongue down his neck and chest to his nipples. If he react to stimulation of any of these areas she would linger there If not, she would move her mouth quickly down to his genital area and begin fellatio, experimenting with numero various oral techniques until the client's responses told her which excited him. The men had different areas of sensi-tivity and liked different kinds of stimulation. Some men liked movement up and down the whole shaft, some hard, some softer. They might prefer sucking, elaborated rhythmic tongue movements, or gentle pressure. The glan

Cream Rises
SEX

Joy of Sex; More Joy *Every bedroom a living room* 608

I and Thou *Big sex* 456

Behold Man *Deep throat, heart, eyeball* 605

Sexual Honesty *Is an aphrodisiac* 608

The Atlas of Sexual Pleasure *Clean dirty pictures* 609

Women and Their Bodies *Self-emancipation* 221

Lovers, Friends, Slaves *The compleat call girl* 611

Bordellos of the Mexican Border

Dear Editor:

Enclosed is a rough copy of our recent publication ($3.50 postpaid) on bordellos on the Mexican-American border.

We feel the publication provides individuals the opportunities to learn first hand some of the attributes of the Latin Culture, as well as see another value system different than the American way.

Many of the places listed are nightclubs as well as dance places and general meeting places. In a sense, the Latin American "Red Zone" is a true communion of souls where music and merriment reign supreme. It may be appropriate to list our publication under "nomadics" or "Communication".

The enclosed guidebook is a definite access device, easily available by mail, and helpful to an individual's education in an area of recreation so popular in the third world.

Please feel free to write any review you feel necessary, hopefully, it will be favorable.

Sincerely,
Raul Mocho
Mission Publications
Box 426
Union City, CA 94587

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of the penis were sensitive for all the men and some liked the call girl to concentrate the stimulation there. The rim of the glans, the vein on the underside of the penis, and the area where the vein meets the glans were also highly erotic for many men. Some clients preferred not to have their testicles stimulated. Others liked them tongued, or sucked with varying degrees of pressure. The call girl might stimulate the upper part of the penis with her hand. Generally, she would also run her fingers along the area between the penis and the anus. If the man responded she would let one finger, lubricated with jelly kept by the bed, penetrate the man's anus. Some clients indicated or asked the call girl for anilingus as well.

Once she had found the kind of stimulation the client preferred, the call girl would synchronize her movements with the rhythm of his pelvic thrusts. If the client's level of excitation continued to build and he did not interrupt her, she would bring him to climax orally. . . .

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Most of the research done on prostitution reflects our culture's denigration of the prostitute. My work, however, led me to adopt a sympathetic view of both the call girl and the client. The behavior of the men I studied suggests that despite the recent "sexual revolution," social attitudes still prevent many men from fulfilling their sexual needs within socially approved relationships. Further, it would appear that male sexual needs have been viewed too narrowly in the past. During the sessions I observed, the clients turned to the call girls not only for the satisfaction of sexual desires but also for the satisfaction of the emotional needs so often fulfilled by sexual relationships—— needs for reassurance, intimacy, relaxation, adventure, self-esteem. The call girls, by providing the clients with satisfactions important to their sense of well-being, functioned effectively as para-professional therapists.

•

The women who become successful call girls are intelligent, perceptive, and attractive, with a good business sense. Most are between the ages of 18 and 35. Though some remain in the business as long as 20 years, the majority move on to another career after 3 to 5 years. . . . Call girls are considered high-class prostitutes both by other kinds of prostitutes and by the men who employ them. Their high status is partly the result of their fees, which deter clients from the lower-income brackets. The 64 women who cooperated in this study charged a minimum of $50 for a single transaction lasting forty minutes or less.

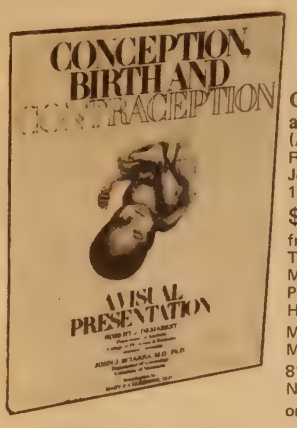
•

Few call girls have orgasms regularly or frequently with customers, but most reach a climax with a client once in a while. All the women I worked with enjoyed sexually fulfilling relationships in their personal lives.

Conception, Birth and Contraception

This book feels *good. Takes the mystery and confusion out of human reproduction. The drawings are accurate, clear and most are life size. Nice to share with inquisitive children.*

—Salli Rasberry



Conception, Birth and Contraception
(A visual presentation)
Robert J. Demarest and John J. Sciarra, M.D.
1969; 129pp.
$8.95 postpaid
from:
The Blakiston Div.
McGraw-Hill Book Co.
Princeton Rd.
Hightstown, NJ 08520
Manchester Rd.
Manchester, MO 63011
8171 Redwood Highway
Novato, CA 94947
or Whole Earth

Boys and Sex
Girls and Sex

If you are an adolescent in need of information about your *sexuality read Pomeroy. Covers petting, dating, your body & sex, intercourse and homosexuality. There is even an introduction for your parents.*

—Salli Rasberry

Girls & Sex
Wardell B. Pomeroy, Ph.D.
1969; 174pp.
$1.50 postpaid

Boys & Sex
Wardell B. Pomeroy, Ph.D.
1968; 157pp
$ .95 postpaid

both from:
Dell Publishing Co., Inc.
1 Dag Hammarskjold Plaza
245 E. 47th St.
New York, NY 10017
or Whole Earth

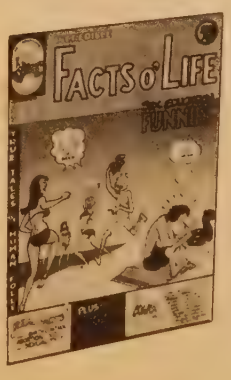
As I have mentioned earlier, masturbation also can teach a girl how to have orgasm, and it does so in the most simple, direct way possible, so that it will be easier for her to have orgasm when she does have intercourse. And there are other reasons in favor of this activity. Because no one else is involved, masturbation is easily available as long as there is privacy. It also permits a girl to learn how her own body reacts and allows her to experiment with herself so that she can more easily teach someone else the things that make her feel good sexually. Then there are other, though minor, things on the plus side: the fact that there is no danger of veneral disease or of pregnancy; that it does no harm to her or ot anyone else; the it offers a variety of sexual experience and provides a way of developing one's fantasy life.

The contrast between boys and girls practicing masturbation is a sharp one. By the age of fifteen, about 25 percent of girls have masturbated to the point of orgasm, while the figure would be virtually 100 percent for boys.

Sex Comix

Found some comic books which seem good vehicles for getting information to teenagers, especially those who have an aversion to reading. Inexpensive—— accurate—— for all your young friends.

—Salli Rasberry



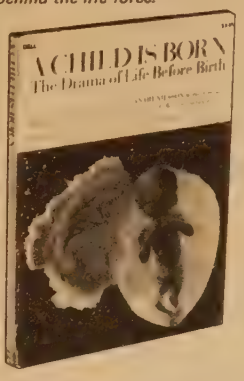
Facts o' Life
(Sex Education Funnies)
Lora Fountain, Ed.
$ .75 each
from:
Multi Media Resource Ctr.
340 Jones St., No. 439
San Francisco, CA 94102

Abortion Eve
Chin Lyvely and Joyce Sutton
$ .65 /individual copies
from:
Nanny Goat Productions
P.O. Box 845
Laguna Beach, CA 92652

A Child is Born

Text by C. Wirsen and A. Ingelman-Sundberg photos by Lennart Nilsson (See also **Behold Man** *Pg. 605). The couple whose pregnancy is followed are out of the nineteen forties and the information can be found better done elsewhere but the photos are fantastic—— capturing physical development from conception until birth. Visual reminders of Tielhard's energy pools. Children love seeing the mysteries behind the life force.*

—Salli Rasberry



A Child is Born
(The Drama of Life Before Birth)
A. Ingelman-Sundberg
1965; 160pp.
$3.95 postpaid
from:
Dell Publishing Co., Inc.
1 Dag Hammerskjold Plaza
245 E. 47th St.
New York, NY 10017
or Whole Earth

Like an astronaut in his capsule the fetus floats in its amniotic sac with the villi of the placenta around it like a radiant wreath. The nebulae and constellations in this firmament are formed by cells from the maternal blood and salt crystals in the fetal waters.

•

There is an unearthly calm in these faces. They look as though they were awaiting eternity. But they are preparing for a short life on earth, and it is not sleep that closes their eyes.

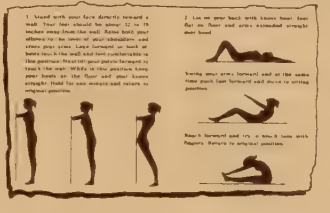
Growing Up and Liking It

Many Public Schools across America offer a personal hygiene class to our sixth grade girls (you sign a slip if you don't *want your child to attend). Pamphlets compiled by the consumer information centers of the various feminine hygiene companies are given to each participant; most are schlocky—— too full of diagrams.* **Growing Up and Liking It** *is a delightful exception—— warm friendly tone, its a nice pamphlet to take to a quiet place and contemplate the mysteries of growing older. Pg. 6 has a nice group of exercises to help get over cramps.*

—Salli Rasberry

Growing Up and Liking It
1972; 23pp.
free

from:
The Consumer Information Ctr.
Box 6-GU
Personal Products Co.
Milltown, NJ 08850



Sex Education Films

Visual materials, particularly films have long been recognized by the Kinsey studies and other investigators, as one of the most important educational and attitudinal aids in the field of human sexuality. Most of the current and past explicit sexual films have been exploitative, private fantasies of film-makers or expected fantasies of the viewers. The Multi-Media Resource Center distributes films which have been made by the National Sex Forum, a teaching institution for people in the helping professions, a part of the Genesis Church and Ecumenical Center. They are the only source of material of this nature in the United States. These films are made primarily from an aesthetic or value oriented point of view. They deal with what people actually do and what they think. The style of the films is sexual documentation of a particular person or person's sexual response pattern at a particular time. People are not "directed" to do some particular thing, nor are they interrupted in any way. The persons in the films are not actors, but rather people who wish to share a portion of their sexuality with others so that they might feel better about their own sexuality. Every attempt possible is made to preserve the integrity of the person or persons' sexual uniqueness. The films cover not only the range of sexual behavior, but also therapy techniques, discussions, and films of sexual minorities such as people with spinal chord injuries. They are currently in use in Universities, growth centers, therapy groups throughout the United States and Hawaii. MMRC also distributes the best of fantasy films by independent filmmakers on the subject of human sexuality. The films are in color, with sound and carefully done technically. Brochure available from Multi-Media Resource Center, 540 Powell St., San Francisco, CA. 94108. Average rental around $30.

—Salli Rasberry

COMMUNITY

Cream Rises
BIRTH & BABES

Textbook for Midwives *Encyclopedia, objective, technical* 612

The Birth Book *Subjective, beautiful* 612

Commonsense Childbirth *Natural childbirth, La Maze method* 219

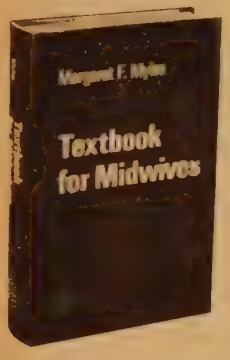
The Womanly Art of Breastfeeding *Nursing* 220

Baby and Child Care *Baby Bible* 366

Textbook for Midwives

From England, where midwivery is widely practiced and legal, this is an encyclopedia on birth. Long sections on anatomy & physiology, pregnancy, abnormalities of pregnancy, normal labor, abnormal labor, the puerperium (post-partum), the newborn baby. Full of pictures & diagrams & highly technical (medical) terminology. It's meant as a textbook to teach midwives their jobs; it can teach anyone who's interested in the process, and is a must for those involved in home deliveries. It's especially strong on the knowledge necessary to deliver in remote areas, and unequivocal about when to seek medical/hospital help.

–DB
[Suggested by Annie Hînes]



Textbook for Midwives
Margaret F. Myles
1953, 1974; 827pp.
$15.00 postpaid
from:
Longman, Inc.
72 Fifth Ave.
New York, NY 10011
or Whole Earth

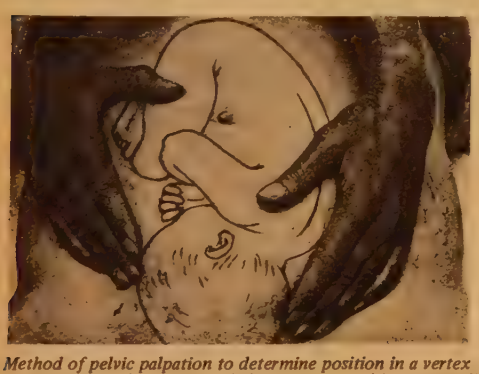
Morning Sickness

About 50 percent of pregnant women vomit between the 4th and 14th week of pregnancy. It usually occurs immediately after getting up in the morning, and at this time retching and the vomiting of mucus, sometimes bile-stained, takes place. The sickness is usually accompanied by nausea which may persist throughout the day and impairs the appetite. If the vomiting of food continues, the mother's nutrition suffers. The condition should never be ignored, for if "nipped in the bud" the serious complication of hyperemesis gravidarum would seldom occur.

Treatment

To maintain the glycogen supply, a light sweet meal should be eaten before retiring: a glass of milk and biscuits would be suitable. Extra sugar should be taken, and it may be expedient to prescribe some specific product, e.g. barley sugar, or treacle. Foods with a high fat content, like butter, cream, pastries and those that are fried ought to be restricted.

The woman should have a cup of tea and toast with marmalade-jelly or a biscuit before getting up in the morning, and although a thermos flask could be utilized it seems to be more efficacious if freshly made tea is brought to her, preferably by the husband. After lying still for half an hour, the woman



Method of pelvic palpation to determine position in a vertex presentation. The higher cephalic prominence (the sincipital) will be on the opposite side to the back; on the right in an L.O.A.

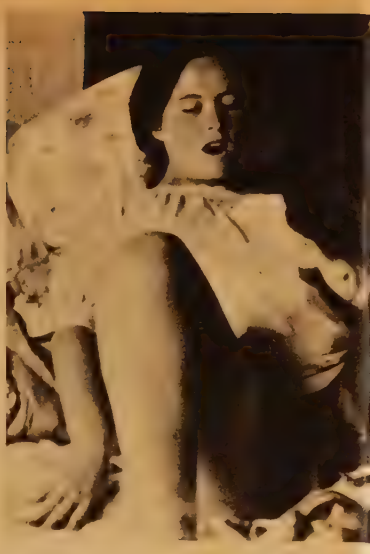
The Birth Book

A generous and joyful book. Natural home birth as a meditation is the poetry and beauty of this remarkable story. The exhilarating dance of the Divine Paradox is ever present as we see oneness giving birth to separateness; pain emerging into ecstasy; labor as a dying and rebirth trip, and the cosmic insight that comes when one realizes, as one of the mothers puts it, "You have to relax to be in control."

The photographs and text fairly ripple with the incredible vitality that is created and experienced at each birth event. This is a modern story about Universal Being–– all that is, ever was and will be–– about compassion that was energized by the courage, integrity and openness of Raven (Pat) and all the mothers, fathers and friends who dared to cut through the fear and dehumanization of current childbirth myths and practices in America.

The Birth Book is a graphic and factual account of 12 natural home deliveries, midwifed by Raven and recorded by a group of young parents living in the Santa Cruz hills that were dedicated to letting natural acts happen naturally. Recognition that the spontaneous flow and wisdom of nature was often distorted by conceptual errors resulted in an expressed need for a place to learn together how to correct these and benefit from each new mother's experience. Thus was born the Birth Center, a place where pregnant women support each other in demystifying the birth experience. Here, training and discussion is available on delivery, pre-natal care, exercises, diet and counsel against taking unnecessary risks when home delivery may seem contra-indicated. The Birth Center has had the sympathetic and verbal consultation of several local physicians, but the AMA bias being what it is, no practicing obstetrician has felt able to risk professional and financial security to work in conjunction with midwife training and home deliveries. However, with the aid of this book and through the Center, the demand for home deliveries and changes in local obstetrical care is accellerating with vibrations that reach far beyond the scope of the Santa Cruz hills.

It was time for the Birth Book to happen. My regret is that it was not on the bookshelves 20 years ago when I was bucking the system during my first pregnancy, yearning to find some social or medical support in having a birth as a celebration instead of as an illness. Through an act of fate, I happened to pluck randomly for a book in the local library and found D. Grantley Read's Natural Childbirth Without Fear *in my hands. That is all I had, but it was enough to give me confidence to stay in tune with what I knew that I knew, and fend off the anesthesia and bottle feeding, both the going fashion in those days. Years later, when I was nearly 40, I again put my trust in the same flow and managed a breech delivery in less than an hour. My doctor thanked me. I believe in the vitality of that inner rhythm and this is where*



Supporting perineum with left hand and easing birth of with right hand.

THE UTERINE CONTRACTIONS

TRUE LABOUR	FALSE LABOUR
(1) Are always present.	(1) Are not always present.
(2) Are accompanied by abdominal tightening, discomfort or pain.	(2) Are not always painful.
(3) Rarely exceed 60 seconds.	(3) May last three to four minutes.
(4) Recur with rhythmic regularity.	(4) Are erratic and irregular.
(5) Are often accompanied by backache.	(5) Are not accompanied by backache.

THE CERVIX

TRUE LABOUR	FALSE LABOUR
(1) The cervix is shortened.	(1) The cervix is not shortened.
(2) The os is dilating.	(2) The os is not dilating.
(3) The membranes feel tense during a contraction.	(3) The membranes do not become tense.
(4) Show is usually present.	(4) There is no show.

should dress slowly and breakfast can usually then be taken and retained. Nausea may be extremely troublesome and the avoidance of hunger by having some easily digested food every two hours may help. The odour of cooking can induce nausea and in persistent cases it might be advisable to make arrangements for the woman to get away from this for a few days.

•

Loneliness breeds fear, and fear is the arch enemy of the woman in labour who is going through one of life's most tremendous experiences, isolated from those to whom she would naturally look for solace. The comforting companionship of the midwife who will listen, explain, encourage and assure, or keep silent as required, is of inestimable value to the woman at this time.

When labour is well established the midwife should remain in constant attendance unless the woman is asleep under sedatives. In that case she should first be assured that baby's birth will not occur for some time, that she will be closely supervised while asleep, and her call-bell answered promptly when she awakes. When left for long periods the woman's confidence in her attendants and herself is shattered. The midwife should appreciate the expectant mother's fear that her baby will be born suddenly while she is alone.

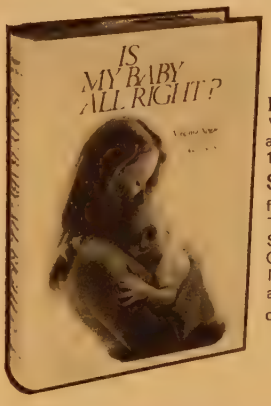
It is essential for the peace of mind of most women that they be kept informed regarding the progress they are making. Women respond magnificently to a word of praise, and being given reasons or explanations, e.g. prior to vaginal examination the woman is told why this is being done and that if she relaxes the findings will be more complete: afterwards she is assured that all is well, and that the baby will, or will not, be born soon.

If the woman is made aware that she will never be expected to suffer more than she can stand, and that she will be given a sedative when she feels the need of it, she is less likely to clamour for relief too soon or to lose her nerve.

Is My Baby All Right?

A surprisingly candid and sensible guide to birth defects. I prospective parents should read it, because it informs with scaring. Birth defects are much commoner than we'd like to think, and genetic counseling far less available than we'l want. This book explains a lot the ways that things can go wrong, treats the major defects extensively, and tells you what can or can't be done about them.

–DB



Is My Baby All Right?
Virginia Apgar, M.D., M
and Joan Beck
1972; 492pp.
$9.95 postpaid
from:
Trident Press
Simon & Schuster
One W. 39th St.
New York, NY 10018
attn: Order Dept.
or Whole Earth

There should be an interval of at least two years between end of one pregnancy and the beginning of another. The shorter the time period between pregnancies, the greater the likelihood of birth defects and obstetrical difficulties. The younger the mother is, the greater the risks to which exposes her offspring by having them too close together

Children who are born only a short interval after the birth a previous baby have significantly lower intelligence when tested at age four than other youngsters, it has been noted the long-term Collaborative Perinatal Project of the Natio Institutes of Health. This research program involves almo 60,000 women and their children.

With every subsequent child, beginning with the third, th is increasing hazard of stillbirth, congenital malformation and prematurity. In part, these added risks are related to other factors, such as the increasing age of the mother, sh spacing between pregnancies and poor living conditions. But even aside from these hazards, the more children a mother has, the chances that each will be born healthy an normal are slightly less.

the Birth Book speaks to me. Our five year old daughter finds this splendid family reading.

—Lois Cammack Bateson

The Birth Book
Raven Lang
1972; 160pp.
$6.00 postpaid
from:
Genesis Press
Box 877
Ben Lomond, CA
95005
or Whole Earth

Sometimes I think the ease of a birth has to do with complete surrender to nature; an acceptance of being a part of something greater than the individual self, like a beautiful spring, or the first heavy rains, or the sound and rhythm of the sea.

•

I believe that some women are cut off from their bodies through our culture and religion and are therefore incapable of knowing the possibilities of the beauty of conception, pregnancy, labor, and birth—— the reality of life's duplication. And of the incredible bond that occurs in motherhood, the beauty of one becoming two. . . . Giving birth is a sexual act. It is done through the vagina. Giving birth has everything to do with one's sex. Some women cannot accept this. . . . The same hormone (oxytocin) that is secreted during the act of love making is also secreted in the act of birth and nursing. Some nursing mothers experience the let down of their milk following an orgasm from love-making.

Nursing is a sexual act. Women receive pleasure in it. Some nursing mothers have experienced orgasm while nursing. So much of the mother's sexual energy is going out to the baby that her sexual desire no longer resembles familiar patterns of pre-birth. It has not been uncommon for men to feel forgotten, left out, and sexually unfulfilled during these months following the birth of their baby. We could call this three month period following birth the fourth trimester. This is a passing phase.

Adoptive Nursing

Not everyone is aware that it is possible for a woman to nurse a baby even if she has never been pregnant or delivered a child. These two pamphlets, **Relactation: A Guide to Breastfeeding the Adopted Baby** by Elizabeth Hormann and **Induced Lactation: A Guide for Counseling and Management** by Jimmie Lynne Avery explore the phenomena for women who want to nurse an adopted baby after previously nursing bio-offspring, and for first-time adoptive mothers. There are many motivations for nursing: mothers of allergic or sick babies want to nurse to make their babies healthier, but most mothers just want to achieve a mutually fulfilling relationship with their babies. Ms. Hormann found that the first-time adoptive mother who had never experienced pregnancy was the most anxious to nurse her adopted baby because of her wish to participate in an important phase of biological motherhood. Both of the the booklets emphasize the term "nurse" vs. the term "breastfeed." Ms. Hormann creates a general axiom: "If you and your baby enjoy nursing, this is all you need to qualify as a successful nursing couple," and even cites the cases of two mothers with pituitary gland defects who nursed their babies for the sheer joy of it even though their milk never increased beyond a few drops. The process is a natural one of becoming familiar with your breasts by gentle massage and firmer "hand expression," sometimes supplemented by a synthetic form of the hormone oxytocin. Ms. Avery's book includes a guide for counseling based on her experience counseling more than 400 mothers, and both booklets contain excellent bibliographies. Two other books, **The Complete Book of Breastfeeding** (Bantam $1.50) and **The Tender Gift: Breastfeeding** (Prentice-Hall $6.95) have chapters on the subject. And don't forget the best guide for nursing, **The Womanly Art of Breastfeeding** (Pg. 220) ($3.00 from La Leche League).

I talked to Dr. Sadja Goldsmith in San Francisco who said she thought adoptive nursing would be extremely hard because even "normal" nursing of bio-offspring in our society can be tough and discouraging. But, if you want to try, the La Leche League office in your area will give you the names of mothers who have attempted relactation if they have volunteered to counsel others. Find your regional office by writing to La Leche League International. These two booklets will also clear up misinformation and give strength.

—Pam Cokeley

Induced Lactation: A Guide for Counseling and Management
Jimmie Lynne Avery
1973; 31pp.
$1.50 postpaid
from:
J.J. Avery, Inc.
Box 6459
Denver, CO 80206

Relactation: A Guide to Breastfeeding the Adopted Baby
Elizabeth Hormann
1971; 21pp.
$1.00 postpaid
from:
La Leche League Int'l.
9616 Minneapolis Ave.
Franklin Park, IL
60131

By using the term "nurse," any emphasis upon the breasts as only dispensers of food is avoided. In fact, "breastfeed" is not to be found in any dictionary, while "nurse," however, is, and is "synonomous with nourish and nurture, and means '. . . to nourish at the breast, suckle, or feed and tend an infant; to take care of; to care or provide for tenderly; to cherish; to foster; to bring up or rear by care; to promote the growth or development, or progress; to hold in one's hand, to caress, to fondle. . .'"

Report from Stephen Gaskin Baby Farm

Since I saw you I've gotten married to a lady named Kathryn and had a daughter named Grace who's 18 months old. Kathryn's a nurse and one of the Farm's midwives. We've delivered about 140 babies in ladies' homes—— and we have some evidence that home deliveries are actually safer than hospital ones. Our local doctor thinks so and wants to do a paper for the AMA on us. (He already did one on the Amish and their home-delivery trip.) **Hey Beatnik!** (Pg. 579) has about 18 pages devoted to Spiritual Midwifery that tells folks what delivering babies is about. Along the same lines, another page says HEY LADIES! in red white and blue letters and goes on to say, "Don't have an abortion, come to the Farm and we'll deliver your baby and take care of it, and if you ever decide you want it back, you can have it." We believe in coming on as strong as we can in favor of life force. We've had a couple of ladies come already who had been going to have abortions, and after they had the baby they decided to keep it.

Love,

Matthew McClure
The Farm
Summertown, TN 38483

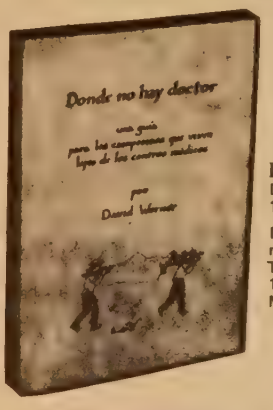
Donde No Hay Doctor

A great paramedical Merck manual for people living far from medical doctors. Relies heavily on Western medicines but outlines the complete home drug store. No book in existence makes diagnoses and cures so easy to understand and practice. Great chapters on skin and eye diseases as well as care of mother and child during pregnancy and birth. We need a similar book in English for Americans—— no matter how close to the doctor's office.

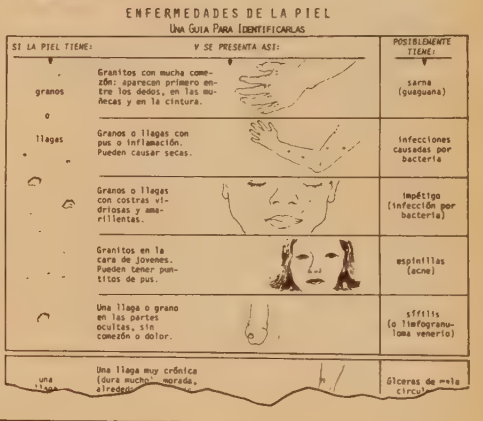
—PW
[Suggested by John Jeavons]

Una gran guía paramedica "Merck" para la gente que vive lejos de médicos. Depende particularmente de medicinas occidentales pero delinea la botica completa para un hogar. Ningun libro en existencia hace diagnosis y curas tan facil para entender y practicar. Gran capítulos sobre enfermedades de la piel y de los ojos, tanto como el cuidado de la madre y hijo durante el embarazo y el parto. Necesitamos un libro similar en ingleś para norteamericanos—— no importa que cerca estan a un consultorio de médico.

—Richie and Carmen Quinones



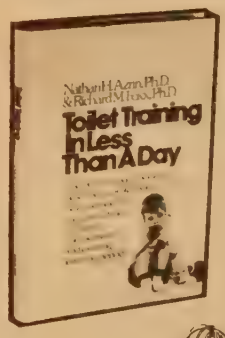
Donde No Hay Doctor
David Werner
1973; 300pp.
Inquire for price of new edition from:
The Hesperian Foundation
140 Leland Ave.
Menlo Park, CA 94025



Toilet Training in Less Than a Day

Couldn't find anyone who's tried this method, but it's mainly devoting one large instead of many small hunks of time to toilet training. Too horn-tooting, but looks good from a common sense basis. Opinions, please?

—DB



Toilet Training in Less Than a Day
N. H. Azrin, Ph.D.
& Richard M. Foxx, Ph.D.
1974; 160pp.
$4.95 postpaid
from:
Simon & Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

Giving the doll a treat for urinating in the potty.

COMMUNITY

One death, one man accepting

This conversation was recorded in 1968 at a conference organized by Gregory Bateson on "The Effects of Conscious Purpose on Human Adaptation." It may be found in the remarkable book by Gregory's daughter, Mary Catherine Bateson, **Our Own Metaphor**, *1972, Knopf. "Warren" in this conversation is Warren McCulloch, one of the primes in the foundation of cybernetics—a wholly indivisible man (have a look at his book* **Embodiments of Mind**, *Pg.* **316***). He died a few months later. Others speaking are mathematician Anatol Holt (first voice) and Gregory. The Gordon mentioned is British cyberneticist Gordon Pask.*

—SB

All of you will probably remember the disaster that took place in Florence with the floods and the great damage that was done to those stored artworks. I had very mixed feelings about it. I thought, from a certain point of view, that it could well be regarded as good rather than bad; that is—yes, it's an occasion for mourning, but on the other hand, it also makes room. You know, there can be only so many masterpieces in the world, quite apart from the physical space in which they're stored, and new masterpieces must be produced, ones whose relations to your old masterpieces are perhaps hard to understand."

Gregory lifted up the blackboard eraser. "You can't live without this."

"Yes, that's right."

"Which is death."

"That's right. You know, the Hapsburgs, for example, accumulated their bodies in a crypt in order at a certain level to insure the continuity of them. You might argue it was a sort of primitive way of doing it. Given Gordon's idea and given that everyone would see his individuality that way, there would be better and cleverer ways of doing it. I don't see my own progeny as the perpetuation of me, at least I don't believe I do."

"I wouldn't swear to that," Gregory muttered.

"I won't swear, but I have to speak what I think anyway. I see it as connected with me, but I see it as a step in my own death and I see what comes out of it as something really different. I think I'm being altogether honest when I say, profound as is my personal commitment to occurrence systems, let us say, I recognize that they must die. They should not survive forever, even if you relativize forever to some sort of practical forever, like as long as our earth rotates around the sun. They too must make way for something else.

"There are perhaps several different directions philosophically in which one could go. One could become more sophisticated in the way Gordon suggests, about what it means for me to continue, so that I don't build vaults any more, or pyramids. But perhaps there is a way of understanding life as in its nature transitory, just as in my theory an arrow is the pairing of a beginning and an end. And since I have the floor, I just want to add one more remark. This is not absolutely in line with what we're now saying, but I was brought to think a little bit, while Gordon was talking, about my comment of yesterday about people's passion for cosmic certainty. They are not satisfied with evincing cosmic certainty. They have to have it!"

We laughed. Gregory leaned forward. "May I make a personal remark, Tolly?" he said. "I think, of all the people that I know, you are the most reproductive in the particular sense that Pask is talking about. Right at the core of your love, not only for your children, but also for other people, is the desire to transmit. . . programs. What have you been doing around here, teaching us your games?"

"No doubt. Absolutely no doubt. I mean, that's biology. That's perfectly true."

"Love in your life means the transmission of programs."

"I want in Gregory," said Warren.

"All right."

Warren was speaking very slowly. "I am by nature a warrior and wars don't make any sense anymore. I am a king, but I'm an anarchist, and in my country, there are simply no laws, not even this one. I went to work modeling the structure of water in tendon. We went out and bought a bunch of jellybeans and toothpicks and modeled the water. And then I found that I had to write on the blackboard, 'The jellybeans are not to be eaten,' and it wasn't until then that I understood why the Pythagorians had a law against eating beans. Now, the difficulty is that we, who are not single-cell organisms, cannot simply divide and pass on our programs. We have to couple and there is behind this a second requirement." Warren began to weep. "We learn. . . that there's a utility in death because. . . the world goes on changing and we can't keep up with it. If I have any disciples, you can say this of every one of them, they think for themselves."

Very softly Gregory said, "Sure, Warren."

"Freedom from and freedom for." We sat in silence for a long pause. "Coffee?" said Warren.

•

Western Attitudes Toward Death

This comforting insightful little study investigates our "progress" from the thoughtful death of old (13th Century and before) to the modern horror of dying. Humans through most of time died with ritual grace.

—SB

Western Attitudes Toward Death
Philippe Aries
1974; 111pp.
$6.50 postpaid
from:
Johns Hopkins
University Press
Baltimore, MD 21218
or Whole Earth

It was essential that parents, friends, and neighbors be present. Children were brought in; until the eighteenth century no portrayal of a deathbed scene failed to include children.

•

. . . he remembered how the old folk used to die back home on the Kama—Russians, Tartars, Votyaks, or whatever they were. They didn't puff themselves up or fight against it and brag that they weren't going to die—they took death *calmly* [author's italics]. They didn't stall squaring things away, they prepared themselves quietly and in good time, deciding who should have the mare, who the foal. . . And they departed easily, as if they were just moving into a new house.

—A. Solzhenitsyn

This eloquent decor of death toppled in our day, and death has become *unnamable*. Everything henceforth goes on as if neither I nor those who are dear to me are any longer mortal. Technically, we admit that we might die; we take out insurance on our lives to protect our families from poverty. But really, at heart we feel we are non-mortals. And surprise! Our life is not as a result gladdened!

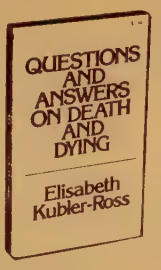
Is there a permanent relationship between one's idea of death and one's idea of oneself? If this is the case, must we take for granted, on the one hand, contemporary man's recoil from the desire to exist, the inverse of what occurred during the second Middle Ages, the thirteenth to fifteenth centuries? And, on the other hand, must we take for granted that it is impossible for our technological cultures ever to regain the naive confidence in Destiny which had for so long been shown by simple men when dying?

•

Questions & Answers on Death and Dying

A sequel to **On Death & Dying** *(Pg. 223). Ms. Kubler-Ross answers the questions most frequently asked about how to relate to the dying. Very personal, intended for professionals & families rather than "the patient." Her answers always return to honesty and dignity and personal choice.*

—DB



Questions & Answers on Death and Dying
Elisabeth Kubler-Ross
1974; 177pp.
$1.50 postpaid
from:
Collier Books
Macmillan Pub. Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

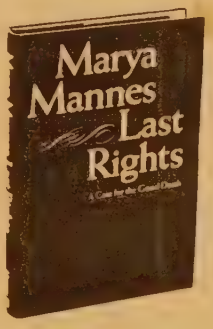
Should suicide be everyone's right? If so, what limitations or parameters should there be as to the time and place and means?

I don't think we should advertise suicide as being everyone's right. There was a time in the history of France when suicide was regarded as the norm. There were certain "health stations" where poison was obtainable by people who wanted to commit suicide. I don't believe in mercy killing or in public facilitation of suicide. I think our role should always be to prolong a meaningful, functioning life and people should get all the help available in order to live meaningfully and spend their time and energy to live and not to contemplate suicide. If a terminally ill patient who is "beyond medical help" contemplates suicide by simply stopping the intake of medication or refuses additional medical help, I think he has a right to do so. I am fully aware that this includes my own judgment and my own differentiation between a patient's right to die his own death, to prevent an additional artificial prolongation of

Last Rights, A Case for the Good Death

A classic apologia both for euthanasia and for a less isolated way of treating the elderly and the ill. All the reasons why we ("society") should reform our attitudes & laws; very little about the personal and social weaknesses that have created them.

—DB



Last Rights
(A Case for The Good Death)
Marya Mannes
1974; 150pp.
$5.95 postpaid
from:
William Morrow & Co., Inc.
Wilmor Warehouse
6 Henderson Dr.
West Caldwell, NJ 07006
or Whole Earth

Incidentally, a patient's pain often decreases when he is finally told the truth of his disease and its seriousness. About fifty percent of doctors tell their patients all. An equal percentage doesn't.

During the terminal phase, a good percentage of patients say 'I want to go.' But they may just be testing what the nurse

Proposals for Legislative Reforms Aiding the Consumer of Funeral Industry Products and Services

An enormous amount of information about the funeral industry; and the legal problems and potential solutions involved in re-establishing burial as a simple, inexpensive, community ritual. (See also **A Manual of Simple Burial**, *Pg. 223).*

—DB

A major reason for high costs is the poor bargaining position of the prospective purchaser of funeral industry products and services. Lack of experience with the consumer/funeral industry transaction and with the business methods of industry members is a factor in reducing bargaining effectiveness. But probably more important than this is the shock caused by the event initiating consumption of funeral industry products and services: the death of a spouse, parent or child, a close friend or relative. The emotional state of

life on the one hand and the actual taking of one's own life on the other.

•

Why is it so hard for many physicians to deal with death and their dying patients?

One of the biggest problems is that we train our physicians during four years of medical school to cure, to treat, to prolong life. The only instruction they receive that has anything to do with death and dying is how to ask for an autopsy. It is very understandable, therefore, that "patients who die on them" are often seen as failures as the physician gets no training on how to be a good physician to patients who are not going to recover.

•

In all your research on death, what is your personal belief of what happens after death?

Before I started working with dying patients, I did not believe in a life after death. I now do believe in a life after death, beyond a shadow of a doubt.

•

If you feel like crying when you are with a dying patient, do you cry with them, or how do you respond?

I have had many tears with many of my dying patients and I'm not ashamed of them, nor do I feel that this is "not professional."

•

How has this work with dying people affected you?

It has made my life much more meaningful and much richer.

•

How do you, if you do, protect yourself emotionally in your relationships with terminally ill patients?

I dare to get emotionally involved with them. This saves me the trouble of using half of my energy to cover up my feelings.

will do or say—— particularly if they're not sure they are dying. When a patient says, 'I wish I could get it all over with,' it may be a ploy to test reactions. So it's hard to say how many patients honestly ask for death.

•

If you want to die "well" and be sure of freedom from heroics and antipain-killer doctors, the best thing to do is pick your doctor with care. Agree on your right to know the truth and share in decisions about care. Remember that most doctors are compassionate men. They are not sadists or ogres.

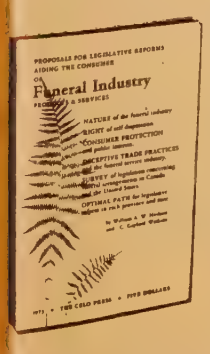
•

For his last three years, Swift sat and drooled, and at least five years before he died in fits of convulsion lasting thirty-six hours, he had written to his niece: "I am so stupid and confounded that I cannot express the mortification I am under both of body and soul."

Garnett concludes: "The story of this man's death points us directly to the broad problem of suicide, as well as to the more particular problem of euthanasia. We get a glimpse of this paradox in our present customary morality, that it sometimes condemns us to live, or, to put it another way, destroys our moral being for the sake of just *being*."

There is also a common ambivalence in the attitude that suicide is a form of cowardice. To evade self requires no courage: to face self and perform the act of consciously destroying it demands great courage. No reversal is possible.

And if aiding and abetting suicide is a crime, then mercy and compassion are both crimes. And the men who withheld the knife and the drug from the raging Jonathan Swift are heroes and saints.



Proposals for Legislative Reforms Aiding the Consumer of Funeral Industry Products and Services
William A. W. Neilson & C. Gaylord Watkins
1973; 149pp.
$5.00 postpaid
from:
Continental Assn. of Funeral & Memorial Societies
1828 L. St., N.W.
Washington, DC 20036
or Whole Earth

person forced to cope with death has been demonstrated to reduce capacity to bargain effectively and rationally for the supply of suitable disposition arrangements.

Vital Signs

Taking a journalist's approach, John Langone reports what's going on around deathbeds, very accurately, often shockingly. Unlike any of the other books here, this one lands us right here, where we are, rather than up there ahead, where we want to go. Thanks.

—DB

Vital Signs
(The way we die in America)
John Langone
1974; 363pp.
$8.95 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154

"All I want to know is that there is someone to hold my hand when I need it. Death may be routine to you, but it is new to me."

—A dying woman to her doctor

•

She was a nurse's aide in what is kindly known as a nursing home, south of Boston.

It was freaking me out, and I wasn't any good for the patients either. Like, whenever a call light'd flash up I'd find myself. . . something'd be telling me not to, you know, move it so fast if it was lighting for a . . . [She starts to say "crock."] a terminal. I don't know. I guess after a while you get to feeling you want to get away from the losers, and that's what it's all about, isn't it? I mean, it's life that's what's important, not death. Death is . . . it's just it, that's all, the end, baby, and there's no pill that's going to stop that one, am I right? Listen, I know that sounds kind of bad, and I don't mean. . . Like, I'm not one of those defeatists who doesn't believe in anything and like that, but let's face it, just like it's not everybody who dies in a hospital or a place like this goes out smiling, with Mom and Dad and the kids crying around the bed, like in the books, or like that real hard-ass under the sheets at the end with her man in *Love Story*. . . . That's too. . . . stereotyped, I guess you'd call it. Maybe some do, but I've never seen that happen too often.

If you want it straight, most of them go out pretty shitty, that's how. They're old in there, you know, and they can't hack it anymore without the medication. Most of them have got some kind of chronic brain thing as well as the physical things that come with just being old. And they aren't just lying there, a lot of them, peaceful and so forth. Most of them are sick, throwing up, incontinent, and when they die it's rough to watch for the most part. Oh, some of them just gasp and give it up, but not all of them like that. Some cry at the end. I'll tell you, like I said, I'd had it.

•

Let me be honest. Every so often, maybe when laparotomy shows multiple metastasis, I wish I had the guts to drop my knife onto the aorta and let the patient go in his sleep. But I'm not God. It's my duty and my privilege to keep him alive. I have to, that's all. If he's suffering, perhaps that's God's will, too. I recall something Pius XII said, that if some dying patients accept suffering as a means of expiation and a source of merit, and they abandon themselves to His will, the doctor should not force anesthesia on them. And if they don't accept suffering, all I can do is relieve that with medication. But I've got to watch what I give him in that weakened state. I can't . . . I am not allowed to kill him, and I don't want to. If he asks for death he's asking me to aid in a suicide, and if I do it on my own, I'm a murderer, simple as that. . .

God has the timetable, not us. I don't believe that it is necessarily right to simply prolong a patient's suffering. That can be pretty horrid, of course. But we can do things about that. . . . This business of living vegetables bothers me. The term has been thrown around too loosely by people looking for easy solutions. We've blown this whole notion of suffering way out of proportion. . . . There are plenty of drugs and techniques for the relief of pain, and the person who is maintained on drugs and machines is not necessarily a rooted piece of . . . of radish. Yes, it's wrong to simply prolong a patient's suffering, but I also believe that to simply let the patient go by stopping all IVs and all medicines which might give him relief is wrong also. For example, it is very bad to stop IVs and let the patient become severely dehydrated even though one. . . . I feel every effort should be made to make the patient absolutely as comfortable as possible. I do not believe in killing the patient, and there's no difference in my mind between letting him go and killing him.

•

She was just crying and crying. She said, what am I going to do, I'm dying. I have little children. What am I going to tell them? And she said, I'm really sorry to be crying. And I said, Oh, it's all right, it's all right. You can cry, and I'm sitting there, of course, really trying not to cry myself. And she said, when my husband's here I can't cry, I have to pretend that I'm not worried when he's here, because he doesn't think that I am dying. Well, I knew her husband knew, but he apparently had been denying it all the time, and she had been going along with him, and they had to play this elaborate little game, pretending it wasn't happening. At this point. . . she had been crying for five or ten minutes. . . and one of the nurses came in and and said, oh what a baby, cut out that crying. What's the matter with you? Cheer up, buck up. What if your husband could see you like this? And there it went, you know, sort of like all the freedom and honesty that she had been allowed for those few minutes completely evaporated and she had to put on her little game again.

A Living Will

Among other services, the Euthanasia Council provides a **Living Will** *form, so that you can formally make your wishes known while you are healthy and have the real power to make decisions about your own death.*

—DB

A Living Will
Price is any (tax-deductible) contribution

from:
Euthanasia Educational Council
250 West 57 St.
New York, NY 10019

We believe

- Society must indicate convincingly that it wants physicians to be humanitarians; as well as skilled technicians.
- Supporting measures should not be used to prolong dying in cases of terminal illness with intractable pain or irreversible brain damage.
- Medication should be given to the dying in sufficient quantity to eliminate pain even if tending to shorten life.

•

To My Family, My Physician, My Clergyman, My Lawyer -

If the time comes when I can no longer take part in decisions for my own future, let this statement stand as the testament of my wishes:

If there is no reasonable expectation of my recovery from physical or mental disability, I, request that I be allowed to die and not be kept alive by artificial means or heroic measures. Death is as much a reality as birth, growth, maturity and old age—it is the one certainty. I do not fear death as much as I fear the indignity of deterioration, dependence and hopeless pain. I ask that medication be mercifully administered to me for terminal suffering even if it hastens the moment of death.

This request is made after careful consideration. Although this document is not legally binding, you who care for me will, I hope, feel morally bound to follow its mandate. I recognize that it places a heavy burden of responsibility upon you, and it is with the intention of sharing that responsiblity and of mitigating any feelings of guilt that this statement is made.

Signed _____

Date _____

Witnessed by:

_____

_____

WHILE YOU'RE UP, GET ME A GRANT

by Doris Herrick

The days of "while you're up, get me a grant" (if they ever existed), are long gone. Competition is stiffer for project funding from government agencies, foundations, and corporate & individual donors, as more community groups get grant-wise. If you want to take your shiny program idea into this melee, there are two sorts of tools you need. One is an overview of the fund-raising scene: strategies and approaches, categories of fund sources, proposal preparation, issues of legal status and financial accounting. A good resource is:

The Bread Game (1973; rev. ed., 96pp., $3.45, Glide Publications, 330 Ellis St., San Francisco, CA 94102, or Whole Earth). An out-front account of how change-type groups, without losing their virtue, can unload some goodies from the establishment bread-truck. Deals primarily with foundations.

There is another reference that I hesitate to recommend only because of its price. If your group or agency can afford the investment, or if you can get your local library to stock it, consult:

The Fund Raiser's Tool Box (Gary Messinger Ray Feldman, and Robert Wellington; 1973; 169pp., $14.95, Strategists, Inc., 538 Abrego St., Monterrey, CA 93940, or Whole Earth). A more comprehensive look at fund sources: federal, foundation, corporate and individual, as well as advice on organizing community fund drives. Lots of good references to other information.

The second tool you need is a detailed rundown of where the available monies are: what foundations give for what purposes, what government grants programs are current, and specifics about how a particular foundation or agency should be applied to. Your local library should have a copy of the "basic book" on foundations:

The Foundation Directory (Prepared by the Foundation Center; 4th ed., 1971, $15.00, Columbia University Press, Stock Dept., Irvington-on-Hudson NY 10533 or Whole Earth).

They may subscribe to:

Foundation News - a bimonthly journal containing an index of recent foundation grants over $5,000 (also published by the Foundation Center, at $10.00 per year).

If your group will be doing ongoing fund-raising, you might invest in these resources for your operation, as well as in the manual of government grant programs:

Catalog of Federal Domestic Assistance (Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, $7.00 plus $2.00 for binder).

These sources, however, give you only a broad-brush picture of where the money is. For in-depth detail, you need access to data compiled by one of the professional information services, such as:

Taft Information System. Taft Products, Inc., 1000 Vermont Ave., NW, Washington, DC 20005. One year, $250.00. Includes: "Foundation Reporter", "News Monitor of Philanthropy," detailed listing of foundation interests, background of directors, sample grants, specifics for application.

Fund Sources Clearinghouse, Inc. 116 South Michigan Ave., Chicago, IL 60603, and 760 Market Street, Suite 1000, San Francisco, CA 94102. One year, $250.00. Includes Grants Daily Monitor, profile of foundation officers, reference services and "how-to" guides.

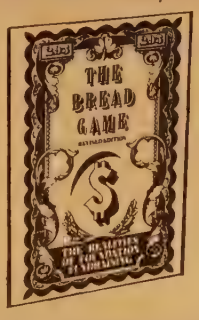
These provide invaluable info, but the expense is prohibitive for most community groups. I suggest that you lean on the larger institutions in your area (colleges, universities, hospitals, research and service centers) that do big time fund-raising and have these materials on hand. There is no reason, if your project is not in competition with their purpose, that they shouldn't—— at their convenience—— make their resources available to local groups. Pressure them also to sponsor a Saturday seminar in fund-raising techniques. They will make points (probably needed ones) with the community. In turn, this aids them in presenting their case, as "involved institutions," to grant donors. Explore public service organizations in your area (like Pacific Change in San Francisco), that give information and advice to grant seekers—— they can be of great help in pointing you in the right direction.

BEST BUY: For $15.00, the Foundation Center will provide you a print-out of a computer search of their grants data banks, custom tailored to the area of your project (i.e., day care center, drug abuse, housing rights), arranged by foundation name, amount, or geographic location of recipient. (Foundation Center, 888 Seventh Avenue, New York, NY 10019/ Telephone: (212) 489-8610).

The Bread Game

If you're raising money from foundations, this blu little book is indispensable. I've been on both sides of the breadline enough to cherish its succinct can in the bullfart atmosphere of granting.

—SB



The Bread Game
(Revised Edition)
(The Realities of Foundation Fundraising)
1973; 96pp.
$3.45 postpaid
from:
Glide Publications
330 Ellis St.
San Francisco, CA 94102
or Whole Earth

Wealthy Individuals. Many wealthy individuals do not hav foundations of their own, but often make tax-deductible contributions to projects. There are all sorts of weird way of finding these people: contribution reports of liberal political candidates, society pages of newspapers, friends a relatives, etc. They can be an excellent source of funds: f because you don't have to go through a bureaucracy to co them; second, because they need the contact from non-wea people. Before you approach them, have everything toget to make it easy for them to make a tax-deductible contribution to your group. Read carefully the legal and fiscal sponsor material in this book!

•

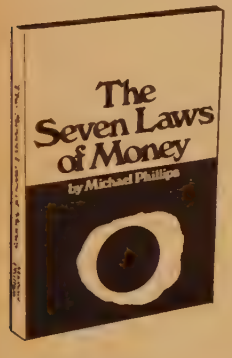
Do It Right the First Time

The importance of good accounting procedures for all organizations cannot be overstated. Too many groups tend to feel that anyone can keep a set of books. Don't be sucked into this attitude—— it can be your undoing. Keep good records from the beginning. Ask the help of a good accountant to at least get the books set up in good o Even though you may write your own checks, make all yo own deposits and do your own posting. Check back with your accountant every three months so that your books ca be reviewed and checked over for accuracy. A good set of books will go a long way toward convincing foundations a other contributors that you are a responsible group.

The Seven Laws of Money

My employer, the President of POINT, cheerfully discounting most of what you may have believed about money, especially that vicious form of it which we call "free money"—— foundation money. Mike Phillips has the experience, being a former bank VP, the financial wizard for Glide Foundation, and head wagoneer for our anti-foundation (he's about to be fired: we all are; our three years are up). Mike Phillips' review for Where the Money Is *(adjoining) may be exactly reversed for his book. It's irrational, self-indulgent, anecdotal, and it works.*

—SB



The Seven Laws of Money
Michael Phillips
1974; 194pp.
$3.95 postpaid
from:
World Wheel/
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

THE FIRST LAW
Do it! Money Will Come When You Are Doing the Right Thing
THE SECOND LAW
Money Has its Own Rules: Records, Budgets, Saving, Borrowing
THE THIRD LAW
Money is a Dream: A Fantasy As Alluring As the Pied Piper
THE FOURTH LAW
Money is a Nightmare: In Jail, Robbery, Fears of Poverty
THE FIFTH LAW
You Can Never Really Give Money Away
THE SIXTH LAW
You Can Never Really Receive Money As A Gift
THE SEVENTH LAW
There Are Worlds Without Money

Money, which represents the prose of life, and which is hardly spoken of in parlors without an apology, is in its effects and laws, as beautiful as roses.

—Ralph Waldo Emerson

When you open a checking account, open it with the large amount of money you possibly can. I'm not kidding! Ev if the average balance in your account is only going to be $ try to borrow a friend's $10,000 (home down payment) f *one day* so you can use it to open your account. You don have to go that far, but anything over a couple of thousan dollars looks good. You can withdraw most of the money a few days after the account is opened. Really! The reaso for this is that the bank records your opening balance on your signature card (and often in other places, too), believ that it is representative of your financial status. I did a stu when I was a banker and found absolutely no correlation between opening balances and the kind of balances that appeared later on in the same account. It's such a strong tradition to do it this way (at least a hundred years old) that bankers still judge people by their opening balance. Try it; the branch manager will smile on you forever more.

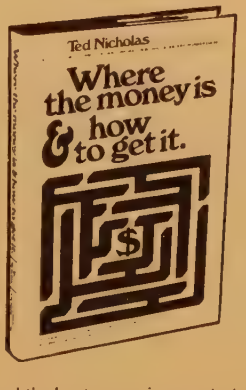
•

When you're asleep and dreaming, that's a world without money.

Where the Money Is & How to Get It

Methods of raising capital. Accurate, simple, clear, short and precise as opposed to bright, wise, sensitive, comprehensive. Expensive, but most public libraries should get a copy.

—Michael Phillips



Where the Money Is & How to Get It
Ted Nicholas
1973; 214pp.
$10.45 postpaid
from:
Enterprise Publishing Co., Inc.
1000 Oakfield Lane,
Dept. C
Wilmington, DE 19810
or Whole Earth

A big mistake often made by entrepreneurs whose venture fails is to start off under-capitalized.

To figure your start-up costs, estimate all expenses. Add up all disasters that are likely to happen—— *because they will.* Then *double* it. This is how much capital you should have.

In your planning, forget any grandiose ideas about your "image." Expensive facilities or fringe benefits for employees will cause you to go broke before you start.

Keep your operating expenses to a minimum. Use your home for an office. If you must, rent a small, inexpensive office. Furnish it second-hand. Do not put in executive benefits and other frills. You must be willing to postpone rewards until the company is a success.

Cut every corner you can. Order a small quantity of stationery Type letters yourself at first. Buy supplies in small quantities.

Find the least expensive way to test your product or service. Work on methods of selling your product or service.

Hire no employees. Enter into contracts for all services the business requires. Pay people for what they do for you on a *results* basis, i.e., pay a typist a fixed rate per page. You wi find people will perform happily and efficiently for you wh they are as motivated as you are to get a job done quickly. You will also attract more capable, independent people.

Hourly and salaried workers tend to do just enough not to get fired. Employers pay them just enough so they won't quit.

Do not incur a weekly fixed payroll overhead nor become an unpaid tax collector for the government by having the recordkeeping expense of Federal, state and city taxes of various kinds. You can't afford it.

A quick way to kill a venture capitalist's interest is paying yourself a higher salary than your former job or by establishing company headquarters in, for example, an attractive tropical place without a sound business reason.

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If you are a Vietnam veteran you may qualify for an Econ Opportunity loan of up to $50,000 at low interest. Repayments can be as long as 15 years. This type of loan c be used to go into business for yourself. You must have be on full-time active duty since August 5, 1964. You need n have been in Vietnam and must have an honorable or general discharge.

The Almanac of American Politics

Who did what, where, when. For each state and district, a recent political history; for every Senator and Representative, a profile, ratings by political interest groups (who his friends and enemies are), his/her voting record on key issues, and federal funds outlaid in his district. True inside dope, know your Congressman.

—DB

The Almanac of American Politics
Michael Barone, Grant Ujifusa, Douglas Matthews
1974; 1264pp.
$6.95 postpaid
from:
Gambit, Inc.
53 Beacon St.
Boston, MA 02108
or
Houghton, Mifflin Co.
Wayside Road
Burlington, MA 01803
or Whole Earth

Ford became the House's top Republican in 1965, when he was a comparatively junior member of the body with only 16 years of service, by unseating Indiana's Charles Halleck. The dump-Halleck movement was one led by the likes of Robert Griffin, Melvin Laird, and Charles Goodell, now all gone on to other things. In the face of the Republican debacle of 1964, Ford promised new, constructive programs, as opposed to the purely negative stance assumed by Halleck. But the obstruction of Democratic proposals has also come to be the present Minority Leader's forte.

Gerald Ford is a deeply conservative man, one who fervently believes in the programs and the leadership of the Nixon Administration. He is anything but charismatic; since 1965, Ford lost the golden locks that journalists liked to contrast with Charlie Halleck's bald pate. Nor does Ford get high marks for erudition. But he works hard, grinding out, one could say, the necessary four yards at a crack. His Republican Caucus is far more disciplined and cohesive than its Democratic counterpart. When an important roll call begins, most of Ford's Republicans are firmly in their seats, and when it is over, they usually prevail with some help from some Southern Democrats.

The strength of Ford's leadership received a stiff test in early 1973. The Nixon Administration supported opening the highway trust fund for mass transit; Ford opposed it. A vast majority of the House Republicans went along with the Minority Leader, not the White House.

When the House has gone in ways opposed by Ford—— notably on the issue of the bombing in Cambodia—— switches among House Democratic members accounted for the final majority. Only about a dozen of Ford's Republicans changed their minds and voted to stop the bombing. Ford may be a plodder, but he is nevertheless an effective, competent Minority Leader.

Back home in Grand Rapids, Ford is a household word. But reelection time for the Congressman is not as routine as it once was. In 1970 and 1972, attorney Jean McKee has held him to 61%—— a figure he has often exceeded in the past. No one expects Ford to lose an election in the 5th district, but unlike his democratic counterpart, Speaker Carl Albert, Ford has to campaign to win.

•

Key Votes

1)	Busing	AGN
2)	Strip Mines	ABS
3)	Cut Mil $	AGN
4)	Rev Shrg	FOR
5)	Pub TV $	AGN
6)	Cmbodia Bmbg	FOR
7)	Bust Hwy Trust	AGN
8)	Farm Sub Lmt	ABS
9)	School Prayr	FOR
10)	Cnsumr Prot	FOR
11)	Chkg Acct Intrst	FOR
12)	End HISC (HUAC)	AGN
13)	Nixon Sewer Veto	FOR
14)	Corp Cmpaign $	AGN
15)	Pol $ Disclosr	FOR

Representative

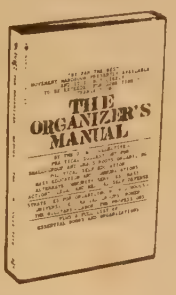
Gerald R. Ford

The Organizer's Manual

Very concrete how-to, mmm, well organize. Mainly around issues, some on special interest groups. (See also **Rules for Radicals**, *Pg. 236). Anyone who's ever been involved in any movement, demonstration, or "change the system" ("end the war") activity will recognize the principles, the pitfalls, the details, details, details. An excellent and thorough book.*

Only glaring omission is any mention of the ever-perking, gut-rotting, pervasive pot of coffee.

—DB



The Organizers Manual
The O.M. Collective
1971; 368pp.
$1.25 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Competent organizers can overcome many doubts and conflicts which tend to arise in all groups. Some pointers are:
— Do not get carried away with your position.
— Be responsible to both the vocal and quiet members of the group. Encourage the more silent members to participate as much as possible so that their abilities and desires become more known. Watch both facial and body expressions. Look for disagreement in the expressions of the silent members.
— Talk openly of power struggles, personal interests, and hidden issues with the group. Don't avoid confrontation—— bring disagreements out into the open.
— Don't allow yourself to be infected by the despair of others. *Disappointment and despair have disbanded more groups than any other problem. They are contagious and must be dealt with as soon as they arise.* The organizer must remember that his attitude will often permeate the group. He must emphasize the positive successes of the group, no matter how small. Talk out anger and despair honestly and openly.

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Organizations live on action and die in committee.

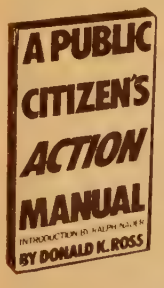
■

This would suggest that a student strike, whatever its precipitating causes, should be regarded as a political action directed not simply against the university, but toward its metamorphosis into an institution of the people. Hence, the double slogan: "Close it down! Open it up!" When this is understood—— first of all by students themselves—— the media will have more difficulty persuading the working people that campus strikers are spoiled suburban brats who don't appreciate their advantages.

A Public Citizen's Action Manual

Manual for becoming an active citizen; covers consumer protection, governmental reform, tax justice, job safety, equal opportunity, and how to organize action groups. Appears to include everything you need to know to act in your community's interest.

—DB
[Suggested by Ronald Lichty]



A Public Citizen's Action Manual
Donald K. Ross
1973; 238pp.
$1.95 postpaid
from:
Grossman Publishers
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

AAA members can help revitalize their automobile clubs if they realize how good the AAA could be. For example, the best AAA affiliate—— the Auto Club of Missouri—— runs an automotive diagnostic clinic to examine members' cars and specify exactly what repairs are needed. After repairs have been made, the clinic will recheck the car to make sure they were done and done correctly. Time after time, the clinic has found members charged for new parts when they received used ones or none at all. And the clinic often finds that a minor adjustment or repair will do when service stations and franchise auto dealers try to sell members repairs costing hundreds of dollars.

•

Property taxes account for about 85 percent of locally raised revenue. This means that the adequacy of schools, sanitation, police, health, and other services provided by local government depends in large measure upon property tax. Unfortunately, much of the available evidence points to poor administration of this tax. Often assessors, who carry out day-to-day administrative duties, are untrained, underpaid, and have too few assistants. Worse, many have serious economic and political conflicts of interest. Tax laws themselves are riddled with loopholes and exemptions which enable the privileged and powerful to evade payment, while burdening other citizens with a disproportionately large payment.

Field investigations repeatedly have demonstrated the truth of these statements:

- Common Cause in Denver, Colorado found that while homes were assessed at 23 percent of fair market value, major businesses were assessed at much less—— as low as 4 percent and even 1 percent of fair market value.

Ralph Nader Congress Project

Long, comprehensive biographies/profiles of every Senator and Representative.

—DB

$1.00 /each profile
$450.00 /all 484 profiles
from:
Grossman Publishers
Ralph Nader Congress Project
Box 19281
Washington, DC 20036

Ralph Nader's research and action groups have produced an impressive number of books reporting their findings. All in paper. Subjects such as pollution (air, water, food), the automobile industry, corporate responsibility.

Booklist
free
from:
Center for the Study of Responsive Law
1910 K St. NW
Washington, DC 20006

Representative Charles Gubser understands the importance of appearances.

Take the supersonic transport (SST), for example. During the 1970 election campaign, Gubser expressed opposition to the project (on environmental grounds). But after the election, he changed his mind and voted for the SST.

Or take the Vietnam war. In 1970 Gubser vowed to support strong legislation setting a pullout deadline. But after the election, the California Republican changed his mind and voted against end-the-war amendments.

Or tax reform. Gubser says he supports it; but when he gets a chance to vote down a loophole or to bring reform legislation to the floor, he is on the other side.

Or defense spending. In 1970 Gubser informed constituents in a newsletter that Congress was requiring new procedures for controlling cost overruns—— without telling them he was one of the most outspoken opponents of the requirements.

Gubser took care with appearances, too, in his refusal to be interviewed on his record by Congress Project researchers. Over a month after he was originally asked to grant the interview, Gubser claimed he was declining on the basis of alleged inaccuracies in a letter circulated by Ralph Nader criticizing a pending bill favored by Gubser's business constituents. When his allegations were rebutted in written detail and sent to his office, Gubser had no further explanation for his refusal.

Organizers' Book Center

Provides a central place where organizers can find out about and order publications full of new project ideas, strategies, theories, skills and encouragement. Its catalog offers 30 manuals, about half of them general organizing handbooks and the rest dealing with specific topics such as day care, community schools, school lunch programs, housing, land trusts, co-ops, environmental action, the media, legal services, and fund raising. Most have been written since 1970, with about half a dozen "classics" published during the previous 20 years; mostly soft-cover prices. An expanded catalog is due in the fall of 1974.

Books For Women Organizers *is a joint project of Organizers' Book Center and the U.S. National Student Association Women's Center. The 19 publications listed have all been printed since 1970. Many are oriented towards the women's movement, dealing with legal and health services, child care and education, and sex discrimination issues. Several general organizing manuals are included. Prices range mostly from $2 to $4.*

—Lorna Jones

Book Lists
free from:
Organizers Book Center
Box 21066
Washington, DC 20009

Law Books for Non-lawyers

Some general comments: By design, the entire legal system (civil, criminal and governmental) is an attempt at compensating for people's inability to relate to each other in understanding and trusting ways. It tries to do this by imposing a set of formal and technical rules and procedures as "solutions" to human problems—— perhaps, sadly, a necessary evil. But unless you enjoy dealing with personal problems in this way, your trying to negotiate the system is going to be an unpleasant and unnerving experience and you're likely to discover that you're not much good at it. For this reason, if you must resort to the system to work out a personal problem, you probably should let a lawyer help you. If someone else has snared you into the system to work out theirs, definitely don't try to do it yourself.

You *can* greatly improve on the quality of assistance you'll be able to get from a lawyer, and keep his fees to a minimum, by educating yourself beforehand. People who are not aware of the general legal problems confronting them and who have not personally assessed the relative values of the alternate solutions waste a lot of lawyer's time (equals dollars) and generally end up with less satisfactory results. This is the value of the various "be-your-own-lawyer" books.

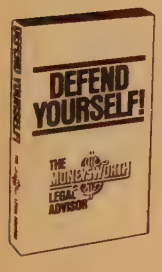
Remember, just because you consider the legal trip to be a cynical artificial game and a rip-off is no assurance that your opponent (be it some government bureaucrat, a creditor or an estranged spouse) is not getting off on it.

—Andrew Fluegelman

Defend Yourself!

Notwithstanding the title, this book is not of the "do-it-yourself" variety, but contains fairly concise introductions to the legal issues involved in buying/selling/repairing a house, starting a business, making a will, getting a divorce and declaring bankruptcy. It's available as a "bonus" for subscribing to **Moneysworth** *(Pg. 227) for a year. Also published separately as "How to Avoid Lawyers."*

—AF



Defend Yourself!
Edward Siegel, LI.B.
1971; 352pp.
($5.00) to Moneysworth
251 W. 57 St.
New York, NY 10019

How to Avoid Lawyers
Edward Siegel, LI. B.
1971; 352pp.
$1.25 postpaid
from:
Fawcett Pub., Inc.
Fawcett Bldg.
Fawcett Place
Greenwich, CT 06830
or Whole Earth

Can You Leave Your Property Any Way You Want To?

It's been said, generally, that you can leave your property any way you want to. But that's not entirely true.

As we've seen earlier (Section C), you ordinarily can't completely disinherit a wife—— although, interestingly enough, in most jurisdictions, a woman can cut off a husband entirely.

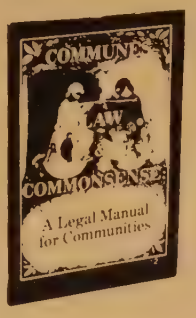
And in several places, there are restrictions on your being able to dispose of your "homestead," other than to your wife and family.

Can you give your property away to charity? Yes—— except for the wife's claim. But there are some conditions attached. A number of states invalidate such gifts if made shortly before death, when you have a wife or children. This apparently is based on the law's fear that a person who's dying may want to "buy" his way into heaven, at the expense of his family. But if the bequest isn't made "in contemplation of death" (say, for example, a year before), it's generally legal. In several states, you can't give more than a limited percentage of your property to charity, such as a third or a half.

Communes, Law and Commonsense

A neat, light-hearted history of the legal difficulties all communes are prone to. Or, what they'll use against you if they don't like you, and how to fight back.

—DB



Communes, Law and Commonsense
(A Legal Manual for Communities)
Lee Goldstein
1974; 124pp.
$2.95 postpaid
from:
New Community Projects
32 Rutland St.
Boston, MA 02118
or Whole Earth

A federal judge in California, faced with a commune arguing that it was a family, stated the law's feelings about families succinctly:

'There is a long recognized value in the traditional family relationship which does not attach to the 'voluntary family.' The traditional family is an institution reinforced by biological and legal ties which are difficult, or impossible, to sunder. It plays a role in educating and nourishing the young, which, far from being 'voluntary,' is often compulsory. Finally, it has been a means, for uncounted millenia, of satisfying the deepest emotional and physical needs of human beings.

•

Carnally knowing a bird in Pennsylvania can get you 10 years' solitary confinement.

•

Probably the preferred legal form for communes in most sta is the non-profit corporation. Every state has laws providin for the formation of corporations organized for social welfare rather than profit. Different states have different sub-groupings for non-profit corporations, including fratern societies, private schools, etc., as well as the more obvious forms. In some states, the law provides for formation of voluntary associations, a form of non-profit corporation with simple filing and record-keeping requirements.

•

Permissible incidental uses can be a particularly fruitful sou of compromise. It may be possible to define the commune some special way to make it fit the zoning laws, as, for instance, a religious order or church, a boarding school, a children's home, or as a residential club. In this way it may be possible for a commune to maintain itself in a residential neighborhood without coming up against the thorny proble of proving itself a family. If such a designation can be gained, then any remaining zoning problems settle down to questions of floor area and parking space which can be negotiated on reasonable grounds without the emotional aura that would surround a disputed attempt to prove the commune was a family.

Wipe Out Your Debts & Make a Fresh Start

This book will tell you all you need to know to decide if you want to go bankrupt. I doubt if you'll have the nerve to do it on your own just from the book, but the author implies that you can. It will, however help you make up your mind whether that's the route for you to take (in fact he encourages you to take that route).

Some interesting contents—— There are many comments (In answer to a questionnaire the author sent out) from people who have just been through bankruptcy; many forms and papers to serve as samples of the legal procedures you'll have to go through. There's a good index to help you locate specific topics, and charts to show what works in what states.

Conclusion: If you're just beat down to a nub financially, this is one book you should read. The key chapter is titled "The Winners Game of Bankruptcy" all the rest are just supporting information to that one, so read it first, then go read the others that sound interesting.

—Frank Armbruster

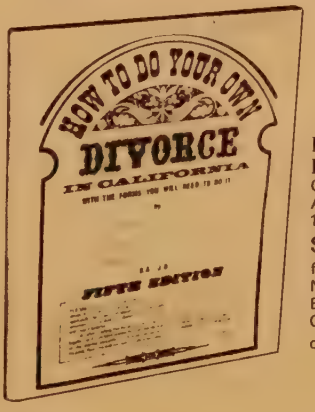
Wipe Out Your Debts & Make a Fresh Start
Jerome I. Meyers
1973; 254pp.
$4.55 postpaid
from:
Chancellor Press, Inc.
Box 1787, F.D.R. Station
New York, NY 10022
or Whole Earth

How to do your own Divorce in California

California's new no-fault divorce is conceptually quite simple, but the forms are somewhat complicated. For two people who desire to terminate their marriage, who have divided their assets and liabilities equitably, who have agreed on the amount of support due, and who have determined custody and visitation of the children, the do-it-yourself method will save them expensive attorney's fees.

The language used is very understandable; the whole process of divorce is made to sound reasonable. But one note of caution—— the law, forms and procedures can change at any time so be sure to check with the local county clerk before starting the process. The main problem with the do-it-yourself approach is that you may not be aware of certain items of community property to which you are entitled (e.g. certain pension plans); or you may agree to certain provisions of the settlement, only to find out later that you shouldn't have. The best suggestion is if you have any doubts about the terms of the divorce, find a lawyer who will talk with you for a nominal fee (around $10 to $15 per half hour consultation).

—Dorothy Bender



How to Do Your Own Divorce in California
Charles E. Sherman
Attorney at Law
1972, 1974; 96pp.
$5.20 postpaid
from:
Nolo Press
Box 544
Occidental, CA 95465
or Whole Earth

When you and your spouse have trouble agreeing.

Often, difficulties in dividing property (especially when there isn't much) are mostly just a continuation of the emotional conflicts which led to the separation. If this is happening, and you can't work it out yourself, there are only a few choices:

a. You could decide that the hassle isn't worth it and give in on all demands, just to get an agreement. This is a dangerous maneuver, not especially recommended, and should be taken only with forethought and caution. Giving in on these points could possibly lead to a whole new set of demands and confrontations.

Make sure that giving in is just what you really want to do, and that it will mean the end of disagreements, not the beginning of a new chain of them.

b. Talk to your spouse and see if you couldn't benefit by both going to talk to a marriage counselor (See A6), attorney (See A7), friend or other trusted person. Try to work it out.

c. Go see an attorney and plan to spend a lot of time and money in legal proceedings.

d. Agree with your spouse that you will go ahead with the dissolution, list all of your property and bills in your Petition, and abide by whatever division the court makes. See B8, below. Be sure you agree ahead of time how you will value the various items of property.

ACLU Handbooks

Knowing what your rights are won't keep you from having them violated, but you'll stand a much better chance of protecting yourself when someone tries. The ACLU is publishing, (8 out of 15 so far) an excellent series of handbooks on the basic legal rights of the poor, students, teachers, servicemen, mental patients, women and suspects. Essential information if you (or a dear one) are in any of these catagories. And since any one of us may suddenly find ourselves being stopped, questioned and searched by the police, the handbook on suspects' rights is required reading for every citizen.

—AF

The Rights of Prisoners
David Rudousky
1973; 128pp.
$.95

The Rights of Students
Alan Levine, Eve Cary, Diane Deiroky
1973; 160pp.
$.95

The Rights of Women
Susan C. Ross
1973; 384pp.
$1.25

The Rights of the Poor
Sylvia Law
1974; 176pp.
$.95

The Rights of Suspects
Oliver Rosengart
1974; 122pp.
$.95

The Rights of Mental Patients
Bruce Ennis & Loren Siegel
1973; 336pp.
$1.25

The Rights of Teachers
David Rubin
1972; 176pp.
$.95

The Rights of Servicemen
Robert S. Rickin
1972; 154pp.
$.95

all postpaid from:
Avon Books
250 West 55th St.
Order Dept. 8th Flr.
New York, NY 10019
or Whole Earth

What if you are walking along, stopped and ordered to empty your pockets?

Perhaps you can start by politely saying that you know that that is an illegal search, that you do not consent to such a search, but that you will not struggle if the police persists in ordering you to submit to the search. If the police persist, which they probably will, and if you have contraband on you, you should then start preparing for trial. If there are two police officers, get both badge numbers (but without writing them down, memorize them), since only one policeman will be the arresting officer and the other officer may be inconsistent in his testimony, which sheds doubt on the testimony of both. If the contraband was wrapped in something like a cigarette pack, an eyeglass case, or even paper, that can be helpful at a motion to suppress and you should try to retrieve any wrapping that the police leave behind. Most importantly, look around you for witnesses, even witnesses who just saw you go in and out of a building. If you can, tell your name to people standing nearby so that if anyone wants to, they will be able to find you. If you get out of jail come back to the scene as soon as possible, and if it is a residential neighborhood talk to people who hang around, visit all the apartments with windows that face the street and ask people if they saw you. If the scene of the arrest is a business area, it may be fruitful, if you know that some people saw the arrest, to distribute leaflets to passers-by who are on the street at approximately the same time of day that the arrest took place. Finding one independent witness, who does not know you and has no stake in the outcome, is something even the most biased judges find difficult to ignore.

At the point of asking you to go with them, the police will usually act very friendly and say that they just want to discuss some matters with you; don't be misled into assuming that they want to talk to you as a friend. Even in states which have the Uniform Arrest Act, covering another type of circumstance, it seems probable that, unless there is an actual arrest, the citizen has the right to refuse. You can ask if you are under arrest, and if they say no you can tell them politely that you refuse to accompany them and that, if they order or force you to go with them, this means that they have arrested you and according to the Fourth Amendment to the United States Constitution, they cannot arrest you unless they have probable cause. If they then insist you must, of course, obey unless you want to risk being forced and/or beaten. At the police station, you can again ask if you are under arrest and if you are not, you should say that you are leaving and begin to walk out the door. If the police do not let you leave, you should insist on having a lawyer and if you cannot afford one, you can tell them that they have the responsibility to get you a lawyer free of charge. You should refuse to answer any questions; this may result in your release since, if they did not arrest you in the first place, it means that they might not have sufficient evidence to hold you.

The Supreme Court has held that the police do not have the right to round up people against whom they have no evidence and take the fingerprints of those people. See *Davis v. Mississippi, supra*, discussed on page 19. Should you be picked up, not formally arrested and directed to submit to fingerprinting, you have the right to refuse; the police will be unable to take your fingerprints against your will since the slightest movement will spoil the print.

—Rights of Suspects

•

Robert Jackson was a Justice on the United States Supreme Court. He developed a serious heart condition and was warned by his doctors that unless he retired from the court and led a very restricted life, he would probably die within a few months. Justice Jackson decided to stay on the Court anyway, and he died a few months later of a heart attack. He had the right to make such a choice. Similarly, a patient in a general hospital may refuse to undergo an operation even if his life depends upon it. He has the absolute right, if he is conscious, to make the choice between surgery and almost certain death. And if that right is violated, he has good grounds to sue the doctor for assault and battery.

—Rights of Mental Patients

•

"Can most parents afford to establish the quality day-care centers that are needed?"

Probably not. Realistically, parents need Federal aid to establish the quantity and quality of day-care centers needed. President Nixon recently vetoed a bill designed to make a substantial start toward Federally supported, comprehensive child-care facilities, and pressure is needed to get a new bill. One feature feminists should be especially wary of is the tendency to make such care available only to the poor. Parents of all income levels need this program, and an absence of quality day care keeps the middle-income woman tied to her home just as much as the lower-income woman. The solution may be to make day care available to all, but on a sliding-fee scale. Women will have to fight for this provision, though, since it faces the opposition of both conservative and liberal Congressmen.

Where can parents get help in establishing day-care centers?

One source of information is the Day Care and Child Development Council of America. The council publishes a pamphlet, *Basic Facts About Licensing of Day Care*, which is available for $.50, and a newsletter, *Action For Children*. Both can be obtained by writing to;

Day Care & Child Development Council of America
1426 H Street, N.W.
Washington, D.C. 20005

The council also has three organizers who will help interested local groups start day-care centers.

Other sources include: *Day Care: How To Plan, Develop and Operate a Day Care Center*, by E. Belle Evans, Beth Schub, and Marlene Weinstein (Beacon Press, $6.95); and *So You're Going to Run a Day Care Service.* The last is available from the:

Day Care Council of New York, Inc.
114 East 32nd Street
New York, NY 10016

—Rights of Women

•

How to Get What the U.S. Government Owes Veterans and Their Dependents

This booklet contains information and addresses of governmental agencies which provide a multitude of free or low cost services. Many individuals and groups would find this booklet very helpful if they would benefit from such services as: free health care for Indians and Alaskan Natives, free government loans for farmers, free tips on gardening, free loaner films (covering everything from Basic Net Mending *to* Oregon and Its Natural Resources*), free use of government land, information and assistance for veterans, free maps of any area in the U.S., how to challenge the I.R.S., free community programs, free termite prevention and control service, etc., etc.*

The booklet isn't cheap but the freebies inside make it well worth the price.

—John Beck

How to Get What the U.S. Government Owes Veterans and Their Dependents
Mark Weiss
1974; 131pp.
$3.00 postpaid

from:
Good News Publishing Co.
Box 2091
Miami Beach, Fla. 33140
or Whole Earth

12

TONGUE FU MEETS HIS SISTER

The Scientologeek recognizes Tongue Fu leaving a workshop in Advanced Breathing.

"Hey! That photo you showed me the other week. I saw her. She's with the Giggling Maharishi caravan over the hill there."

"Oonga-Boonga, Patoonga."

"I beg your pardon?"

"That is an ancient blessing of appreciation. I am a Patoonga priest."

"Beautiful. I thought you were a plainclothes cop looking for a runaway."

"I do not lie. She is my sister. I must go find her."

Over the hill, the Giggling Maharishi is in the middle of delivering a lecture on Transcendental Lactation to a group of disgruntled dairy industry conventioneers wearing *Milk Does Something to Every Body* lapel buttons.

"After all," he giggles, "statistics show that bottle-fed babies have a higher infant mortality rate." Giggle. "You westerners are very anxious to export your artificial culture to underdeveloped nations, from the cradle to the casket." Giggle, giggle. "You send us bottles we cannot sterilize adequately, to fill with expensive formula that must be watered down so we can afford it." Triumphant giggle. "But if you want a formula for living, I can give you that, as I have done with many famous people...."

Flashiebackie:

Back in the mountains of India, the Giggling Maharishi is listening patiently to the Beatles singing *Hey, Jude* under a tree. When they get to the line, "Take a sad song," in the lyrics, he stops them abruptly and says: "I demand to know why the four of you have decided to leave so suddenly, after all I've done for you."

John: "You're supposed to know everything. So why should we tell you?"

George: "Wait, I think we own him an explanation."

Paul: "The truth is, we discovered that you gave each of us the exact same so-called individualized mantra."

Ringo: "Of course, we had to betray your confidence in order to find that out."

The Giggling Maharishi angrily takes his portable tank of nitrous oxide and leaves, while the Beatles continue singing: "— and make it better...."

Tongue Fu sneaks around the grounds until he chances upon this pastoral scene: a couple of dozen females in their teens and twenties, all sitting quietly crosslegged in a large circle in the meadow, each simultaneously munching on a brownie, nursing a baby with one breast and pumping the other breast of its milk into a special container.

He recognizes his sister among them, but rather than interrupt, he walks slowly around their perimeter, playing a soothing melody on his kazoo. Several of the women look up, smile and utter "Far out."

One by one, they get up and pour the contents of their special containers into a huge Mason jar. When Tongue Fu's sister does this, he approaches her and introduces himself.

"Whew," she says. "I've been eating hash brownies all morning. This is quite a heavy trip you've picked to lay on someone so thoroughly stoned as I am."

"Did not our mother ever make mention of me?"

"Yes, once. But she may be the only thing you and I have in common."

"I wish only to make contact. May I hold your child?"

"Sure. Here, Kilo"— she carefully passes the baby— "say hello to your Uncle Tongue."

"I have never held a child before."

A totally non-verbal quarter-of-an-hour later, Tongue Fu leaves, just in time to join that group of disgruntled dairy industry conventioneers, all being given free samples of *Maharishi Hashish Yogurt*.

On the way to store his yogurt stash in the office refrigerator, Tongue Fu spots the frankfurter maker, weeping bitterly into his sauerkraut.

"That fuckin' Department of Agriculture," he cries. "Now they're gonna permit fatty hog jowls to be used in hot dogs. I'm so discouraged."

An eager passerby pulls a tissue out of a box and hands it to the frankfurter maker.

"Here, wipe away your tears with this."

The tissue has a stenciled portrait of an obese teenager with the caption: *Who Is Guru Golly Ji?*

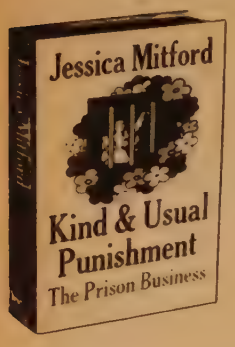
The frankfurter maker blows his nose and smears the image.

[Continued, page 641]

Kind & Usual Punishment

Old fashioned intelligent muckraking with a heart. The book is a thorough, agonized exploration of the validity of the very concept of prisons. The dehumanizing and inhumane aspects of prison life are chronicled in detail, and Ms. Mitford stresses, over and over again, the simple fact that prisons don't work. There is a list of organizations acting to change the system in the appendix.

–DB



Kind & Usual Punishment
Jessica Mitford
1973; 340pp.
$1.95 postpaid
from:
Vintage Books
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Dr. Keith Brody of Stanford University, who said he runs a "unit for mood disorders," stressed the importance of "intensive data collection" via spinal taps and other tests: "These tests can lead to therapy decisions. We need to segregate out and dissect out these sub-groups." Other proposals for therapy were to burn out electrically those areas of the brain believed to be the "source of aggressive behavior"–– one speaker said he reckoned about 10 percent of the inmates might be candidates for this treatment; the administration of antitestosterone hormones, which have the effect of chemically castrating the subject; the use of pneumoencephalograms (injecting air into the brain cavities, an excruciatingly painful procedure).

Asked whether the Anectine torture "therapy" would be resumed in the new unit, Mr. Bennett did not answer directly but declared with some exasperation, "If it could be shown empirically that hitting an inmate on the head with a hammer would cure him, I'd do it. You talk about his civil rights–– civil rights for what? To continue to disrupt society?" Nor would he answer the further questions: "Does not the prison system itself, and particularly the Adjustment Center, generate violence?" and "Would the researchers be directing any part of their inquiry to violence by guards against prisoners?"

As for the compliant participation of the distinguished group of faculty members in this bizarre discussion, one possible explanation was suggested by the lone black psychiatrist present, Dr. Wendell Lipscomb, who had stormed out of the meeting halfway through, declaring he "couldn't take any more of this crap." Later, he told me, "What you were seeing at that meeting were the grant-hunters, hungry for money, willing to eat any shit that's put before them."

•

Dr. Frank Tannenbaum, a pioneer student of prison, wrote in 1922: "We must destroy the prison, root and branch. When I speak of the prison, I mean the mechanical structure, the instrument, the technique, the method which the prison involves." In 1972 Federal District Judge James Doyle of the Western District of Wisconsin, ruling on a prison mail censorship case (*Morales v. Schmidt)*, wrote: "I am persuaded that the institution of prison probably must end. In many respects it is as intolerable within the United States as was the institution of slavery, equally brutalizing to all involved, equally toxic to the social system, equally subversive of the brotherhood of man, even more costly by some standards, and probably less rational."

I share this conviction. But I also agree with the authors of **Struggle for Justice**, one of the most thoughtful and important texts to come out of the current prison turmoil, when they note "the impossibility of achieving more than a superficial reformation of our criminal justice system without a radical change in our values and a drastic restructuring of our social and economic institutions. . ."

Books For Prisoners

The San Francisco Public Library runs a book project for the four S.F. County jails. They have succeeded in gradually building up the prison libraries, so that they now function like any other branch library. This means that, in addition to weekly deliveries of new books and magazines, prisoners can request specific titles and be sure of getting them. The extent of censorship and accessibility depends entirely on the individual facility, and its personnel. All books in the women's jail are left in the day room; in the men's jail, they are locked up and prisoners have to request permission to check them out. Censorship is at a minimum, and usually originates at the jail itself. The Library takes the position of complete non-censorship, and when any book is denied to the prisoners, the Sherriff's attorney goes to work, "wriggling it through the bureaucracy." The Sheriff's wholehearted support of the project is undoubtedly a critical factor in its success. There was a period of time when all the jails were refusing judo and karate books, because "the prisoners were practicing on one another."

In New York, the Association for American Publishers, in response to the Attica riot in 1971, established a Books for Prisoners Task Force, which distributes books donated by publishers to prison libraries. There's a long article about the Project in **Publisher's Weekly** (June 17, 1974). The histories of these two projects are remarkably similar; anyone thinking of starting such a project should bear these things in mind:

The most critical factor in starting such a program is obtaining the cooperation of the prison officials involved. Needs time, lots of discussion, personal relationships. If you just show up at the jail with an armload of books, expect a cool reception. The San Francisco deputies "*very gradually* realized that the prisons wouldn't fall apart if the prisoners got to read what they wanted."

It's very tough work for the staff, volunteers, students involved. It can be depressing, and is always emotionally wearing to walk into "the ugly reality of prison life." It gets better if the same person goes every week, but as the resistance of the deputies goes down, the prisoners' demands go up–– "You didn't bring me my book!!"

Most in demand by prisoners are ethnic books, especially black writers, and periodicals. Newspapers and magazines should donate 20 copies of each *current* issue to prisons, as one small San Francisco paper does. They're eaten up. The prisoners seem to need, more than anything, to be in touch with the world they're not living in.

–DB

Justice

1. The criminal justice processes are not fair nor effective, there are no protections against inane or malicious proceedings, nor just recourse subsequent to them. 2. The human being who is in the nonconforming minority is especially anathema to that criminal justice practitioner who gladly acts as hired gun for the conforming majority. 3. Those without political power, social position, or economic leverage *must* be obedient and deferential in order to minimize discourtesy, abuse, injury or death. 4. There *are* human beings working within the criminal justice system and they often *are* able to help people (even while appearing to be traditionalists interested only in applying massive immediate force, making busts, prosecuting, penalizing & punishing.) 5. We should give every agent the *chance* to perform humane social control for the community, and we should *respect* those who are respectable. 6. Read: Egan Bittner, **The Functions of Police in Modern Society** (1970, US Govt Ptg Office, PHS Pub No. 2059); and Jessica Mitford, **Kind and Usual Punishment** (1973, Knopf.). Love&Peace&Whatever––

A.C. Germann, CSU, LB
Professor, Dept. of
Criminal Justice
Long Beach, CA.

Akwesasne Notes

Indigena

If you're involved in American Indian activities, **Akwesasne Notes** *is essential reading–– the best conduit of news on everything going on.* **Indigena** *particularly focuses on South America–– where the killing of native life is on the increase.*

–SB

Akwesasne Notes
No fixed price, but donate generously
from:
Akwesasne Notes
Mohawk Nation
via Rooseveltown, NY
13683

Indigena
brochure
from:
Indigena
Box 4073
Berkeley, CA 94704

The Jaime de Angulo Library

Jaime de Angulo was a remarkable man: anthropologist, doctor, linguist, cowboy scholar and poet He spoke 17 different American Indian languages and lived on and off with California's Pit River Indians for 40 years, traveling in their jalopy caravans (in the early 1900's), sitting around their campfires, listening to their tales, legends, and myths. He then lived for some years on a high ridge in Big Sur and obviously roamed the hills, got to know the trees and bluejays, stars, winds, coyotes and canyon spirits. "cultured though he was, versed in so many things–– medicine, folklore, magic, anthropology, languages–– his spirit was as wild and unpredictable as this wild and lonely coast where he finally anchored," wrote Henry Miller.

Jaime was not an acceptable anthropologist to the universities: getting drunk and rolling around in ditches with Indians was hardly academically respectable, and most of his writings (in spite of help from Ezra Pound, an early fan) went unpublished. Happily, Bob & Eileen Callahan of Turtle Island Foundation recently discovered a number of unpublished de Angulo manuscripts (in a cardboard box at the home of Jaime's widow in Berkeley) and have come out with a series of small, exquisite books beautifully printed by Clifford Burke of Cranium Press.

Indians in Overalls *is about the Pit River Indians, their language and myths. "Real Primitive People," he wrote, "not like those 'cultured' Indians of the Southwest. . ."*
Don Bartolomeo, *narrated by the last Indian of the Surenyo tribe tells of pre-"civilized" California, where ". . .each little ravine, especially those where water runs, belongs to a spirit who lives there. . .", where foxes discourse on the newly-arrived white men who ". . .use a special kind of bow and arrows. It makes Pum! and you have not time to dodge. If they ever come here, it will be our end. . ."* **The Lariat** *is the strange haunting tale of the confrontation between a Franciscan monk and an ancient Esselen Werbear shaman. In it birds and foxes speak to each other as you know they must. Two other books make up the Jaime de Angulo Library and four more books will soon be issued. (Jaime wrote* **Indian Tales,** *Pg.* 369*).*

–Lloyd Kahn

Prison/Ashram Project

Currently being organized is a project to provide prison inmates with the resources to convert their prison experiences to an ashram experience. There are several aspects of prison life which are analogous to the confrontation and growth those of us outside prison have experienced in meditation retreats, spiritual study, etc. While in prison, we have an opportunity for constructive use of isolation or limited freedom, however most prison libraries don't offer us the encouragement we get from our personal collections or the volumes at our centers.

In order to make available at prisons a broad and select group of outstanding books for spiritual nourishment, we have to bring them there. We've been speaking with several publishers about possible arrangements our Prison/Ashram Project can have to obtain books at reduced cost. But it has occurred to us that our used books are equally precious for this purpose. In fact, there is something about a book having already inspired us which makes it even more attractive.

If you have, in your personal or ashram library, books which have inspired you, perhaps you would like to share your good fortune with our family behind bars. If you're interested in hooking up with us in this work, pick books you feel would be useful, pack them well, and mail them (library rate: 3c x lbs. + 3c) to:

Prison Library
Box 1080
San Rafael, CA 94902

or

Prison Library
Rte. 1, Box 395
Bahama, NC 27503

If you include a return address we will acknowledge receipt.

Ram Dass

Trimbach, an 18-year veteran of the FBI, said he did not remember assuring Nicol a second time, in the FBI's Minneapolis office, that there had been no wiretapping at Wounded Knee.

So it was a matter of great interest to all concerned that the defense should show up in court with an affidavit dated March 7, 1973, signed by Trimbach himself, referring to the phone inside Wounded Knee. "The telephone which is sought to be tapped has been used extensively by the leadership of the American Indian Movement " he had said.

The fact that the FBI had tried to get a court order to make their wire-tap legal interested the defense, and in the ensuing questioning, the FBI seemed to get mired deeper in distress.

The affidavit tripping up Trimbach showed up during questioning by the prosecution of FBI agent Parker, who had helped to process the application to the Justice Department. The FBI originally furnished to the prosecution only page two of the three-page affidavit--- Trimbach's signature was on page one and three, it later turned out. However, Enlow said this failure to produce the entire document was "a clerical error."

Again, Hurd, the prosecutor, was called to the stand as a witness. He said that he had seen Trimbach sign the affidavit requesting the wiretap on March 7, 1973, in Pine Ridge-- in fact, he was forced to admit that Trimbach's statement was notarized by his (Hurd's) own secretary. Thus the prosecutor must have been aware that his own witness Trimbach, had not told the truth when he had been on the stand two weeks earlier.

Hurd said he too had seen the affidavit a few days before when page two had been shown to him by the FBI. But he too had decided that the affidavit was not among the materials covered by Judge Nichol's subpoena.

•

A James Bay Cree Woman. . . what life for her kids?

•

Next time someone talks about native people speaking better English, remind them that skunk, raccoon, moose, quahog, mackinaw, hickory pecan, succotash, woodchuck, hominy, squash, opossum, persimmon, tomahawk, moccasin, caucus (meaning an elder counselor), muskrat are just a starter on native words-- not to mention Chicago, Tallahassee, Mississippi, etc.

WHO EATS OUR LAND?
at
Black Mesa
Tesuque
James Bay
Bear Butte
Lame Deer
Alaska Pipeline
Havasupai

People: I don't think we should use this cover. While it is fashionable to blame large corporations for consuming Indian land and water, and while it's true they do, we fail to realize that the European/American life-style itself is the ultimate consumer-- the corporations are the harvesters. People can look at the cover, sitting in comfortable suburbs, and say "Evil Corporate Power Structure" but continue to be outraged if there is a gas shortage or if there isn't enough water for their lawns. Indians, too, need to understand that by adopting European life-styles, they place themselves at the mercy of the very corporations they condemn.

Why not show the American consumers' addiction by showing land, trees, earth, rivers, connected to a hypodermic syringe, labelled "more and more", being administered to a consumer junkie by a corporate pusher.

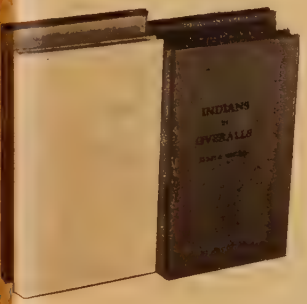
–Rarihokwats

•

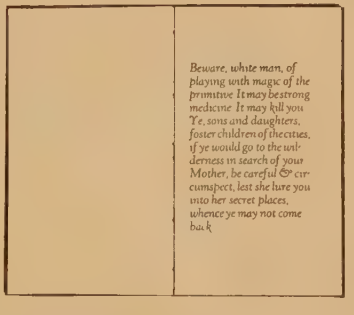
AKWESASNE NOTES Resource Catalog: A listing of books, albums, and other resources. Handy for schools and libraries, and for individuals who want more books on native matters. We'd be glad to send it upon request-- a quarter would help with printing and postage costs.

•

–Indigena



The Jaime de Angulo Library:
Indians in Overalls $6.00
Coyote Man & Old Doctor Loon $6.00
Don Bartolomeo $6.00
Coyote's Bones $7.00
The Lariat $7.00
All five: $32.00
25¢ handling charge per order
Available only by mail
(or free brochure)
from:
Turtle Island Foundation
2907 Bush St.
San Francisco, CA 94115



The spirit of wonder, the recognition of life as power, as mysterious, ubiquitous, concentrated form of nonmaterial energy, of something loose about the world and contained in more or less condensed degree by every object-- this is the credo of the Pit River Indians.

•

Here was Jack Folsom who was a little boy when the first white men arrived. Was there anything left? How much had they changed? My God, think of it, to pass in one life time from the stone axe to wireless telegraphy!

•

. . .Everything is living, even the rocks, even that bench you are sitting on. Somebody *made that bench for a purpose*, didn't he? Well then *it's alive*, isn't it? Everything is alive. That's what we Indians believe. White people think everything is dead. . . ."

"Listen, Bill. How do you say 'people'?"

"I don't know. . . just *is*, I guess."

"I thought that meant 'Indian.' "

"Way. . . Ain't we *people*?!"

"So are the whites!"

"Like hell they are!! We call them *inillaaduwi*, 'tramps,' nothing but tramps. They don't believe anything is alive. They are dead themselves. I don't call that 'people.' They are smart, but they don't know anything. . . . Say, it's getting late, Doc, I am getting sleepy. I guess I'll go out and sleep on top of the haystack. . . .

•

Antelope had been watching him. "That's no way to make a fire," she said smiling. "Watch me."

She took the stick and twirled on it fast, fast, fast. The punkwood began to smoke. She blew on it gently. . . gently. The wood began to flame.

"How do you do that, mother?" Fox asked. "Why doesn't it work for me?"

"You're not patient enough," she laughed.

Old Man Coyote stirred in his bed. "What's that sound? What's that sound? Is it raining? It sounds like water in the creek."

"Go back to sleep Uncle," Fox said. "It's just mother. . . laughing."

The Black Woman

This collection of the writings of black women (fiction & non-fiction) is consistently stunning and clearheaded. With voices like these, they more than prove the premise of the book-- that no one can speak for them as well as they can speak for themselves. White feminists would do well to listen closely; there's no whine here.

–DB
[Suggested by Doris Herrick]

The Black Woman
(An Anthology)
Toni Cade, editor
1970; 256pp.
$.95 postpaid
from:
Signet Books
New American Library
1301 Avenue of the Americas
New York, NY 10019
or Whole Earth

"When you going?"

He turn his back to me. "Oh, I don't know. You know what the song say, 'When a woman take the blues, She tuck her head and cry. But when a man catch the blues, he grab his shoes and slide. 'Next time I get the blues," he laugh a little, "next time the man get too much for me. I leave here and go someplace else. He always chasing me. The god damn white man." He turn over and reach for me. "You feel good. He chasing me and I chasing dreams. You think I'm crazy, huh? But I'm not. I just got so many, many things going on inside me I don't know which one to let out first. They all want out so bad. When I play-- I got to be better, Martha. You gon help me?"

"Yes, Time, I help you."

•

Washington Watch

The best window on the D.C. open ward since I.F. Stone. I use it, and I'm not even interested.

–SB
[Suggested by Chuck Missar]

Washington Watch
(A Private Newsletter)
Tristram Coffin
$12.00 /yr (24 issues)
from:
Washington Watch
South Point Plaza
Lansing, MI 48910

* Crazy government spending priorities. Unfilled needs for water and sewer systems, education, health care, conservation, housing, research pile up, but the Administration wants "a record breaking military budget for the fiscal year 1975," according to SANE. "The full price tab exceeds $100 billion when the various parts are added together. . . Year after year, huge sums of military dollars have been pumped into the economy without producing goods and services the public can buy." *This has been the most significant cause of inflation for an entire generation.*

"Military-induced inflation is stoked by nuclear overkill (almost 8,000 H-bombs, 36 for every major Soviet city); over half a million troops overseas; armed forces overloaded with senior officers and clerks; a million Pentagon civilians; cost overruns and a procurement system that rewards waste. A $400 TV set would cost $8,000 if manufactured by some electronics firms retained by the Pentagon, according to testimony by A. Ernest Fitzgerald."

AP reports: "The General Accounting Office says the development of 55 new weapons systems has brought cost overruns totaling $26.3 billion. *The new estimate represents a $7 billion increase during the second half of 1973 alone."* Twenty-four of the 55 systems are a year or more behind the planned delivery schedule.

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The Sierra Club Bulletin (April 1973) reports that multinationals are stripping "vast tracts of virtually untouched forests" in South America, Africa and Southeast Asia in a technique known as "slash and burn." Millions of acres are being destroyed. "A large plot, where hundreds of thousands of acres are exposed to the sun, quickly dries out, forming a hard, almost impervious crust.

"Plants re-establish themselves only with great difficulty, and the parched, barren land, exposed to torrential rains, quickly erodes. . . Where plants do manage to establish themselves, they are often undesirable species of grass or shrub, useless either as pasturage or wildlife habitat. . . Little or no consideration is given to future consequences." This at a time when the world faces famines. The companies involved are American (an ITT subsidiary has 525,000 acres in Sumatra), Japanese, British, Dutch and Scandinavian.

The Atlas of Africa

The **Atlas** *is the result of five years of research and preparation. It goes beyond geography to deal with the human and economic aspects of each country, via both maps and text. It is available in French or in English. Editions in other languages will follow.*

—RA

The Atlas of Africa
Regine Van Chi-Bonnardel, ed.
1974; 335pp.
$80.00 postpaid

from:
The Free Press
Macmillan Publishing Co.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

There are more than 600 main languages in Africa, each subdivided into a host of dialects, some spoken by only a few hundred persons. Several languages are widely spoken outside their original area, as a result of migration or political domination or trade activity. They then become the language of communication.

Although presenting a multitude of forms, all African languages have in common a rich vocabulary and a lively sense of the concrete. In the Ewe language, for example, (a Negro-African language of the Kwa group) there are four verbs meaning "to eat", depending on what one is eating; 40 words to describe the human act of walking. The tongues are the richer and more concrete in that the majority of African civilizations, lacking writing, are *oral civilizations*, giving a large role to speech (social life gives the greatest importance to palaver and oratory).

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Black Interest

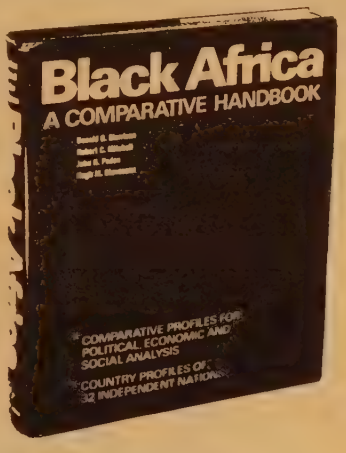
The material on these four pages was gathered and prepared by Robert Chrisman (RC) and Robert Allen (RA) of **The Black Scholar.**

It's a measure of something that, current as I thought I was on what's available and interesting in the book world, damn near all these items are news to me. And their contents even more so.

—SB

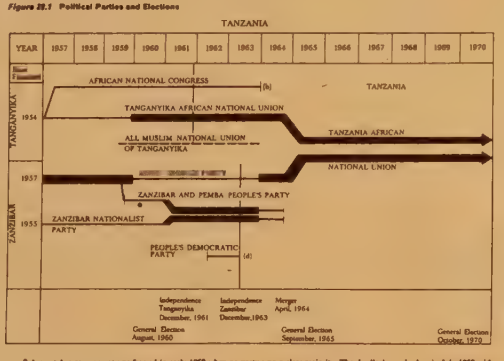
Black Africa

Black Africa *brings together—— for the first time in a clear and readily accessible form—— systematically distilled, comparable data on political, economic, and social variables for thirty-two independent black African nations. Anyone interested in African studies, but especially any scholar or student undertaking a cross-national study, will find these data invaluable in constructing reliable and complete comparisons of current realities among the nations of this region.*



Black Africa
(A Comparative Handbook)
Donald G. Morrison, et. al.
1972; 483pp.
$29.95 postpaid

from:
Free Press
Macmillan Publishing Co.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth



In order to understand Black Africa's dynamic response to modernization it is important to realize that the traditional culture of its peoples was tribal rather than peasant. This means that the basis of social organization lies in kinship units larger than the immediate family rather than in villages and the immediate family; that land rights are held by groups such as clans, lineages (people tracing their relationship to a common ancestor), or extended families (kin groups larger than the parent-children unit) rather than by individuals; that political authority often involves checks and balances ensuring to some degree the consent of the governed rather than being vested in a relatively absolute ruler; that traditional African religion involves local cults and ceremonies rather than a universal religion; that villages or homesteads rather than cities are the characteristic places of residence; and that culture is transmitted by oral rather than written tradition.

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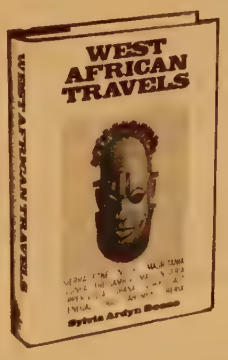
West African Travels

A guidebook which introduces the contemporary African scene, combining information about where to-go and what-to-see. There is a city-by-city survey of fourteen West African capitals, including the ma cities of Guinea, Ghana, Mali, Upper Volta, Nigeria Senegal and the Ivory Coast. Specific information i given on markets, shopping, places of interest, entertainment, hotels and restaurants.

—RA



West African Travels
(A Guide to People & Places)
Sylvia Ardyn Boone
1974; 430pp.
$8.95 postpaid
from:
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

First of all, *use only your right hand for greeting another person.* Waving good-bye, shaking hands, friendly touching all are performed *only* with the right hand. (After a coup d'etat toppled a prominent African head of state, one of hi ambassadorial appointees testified that he knew the Presid was becoming an "evil man" because, at a state dinner par he had reached out to him with his left hand. The statemer brought nods of understanding from the court, and was entered as damaging evidence.)

Next, give *things to people only with the right hand, never with the left.* There are no exceptions to this. If you have something in your left hand, transfer it to your right hand before you pass it. If your right hand happens to be wet or dirty at the moment you are asked to accept or pass somet what you do is crisscross your arms with the right over the left so that the left hand you reach with is at least coming from the right side of your body. You thus indicate that y know the rules but are asking forgiveness for the breech of etiquette.

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I always follow the West African custom of giving a "dash" a dash is like a tip, but it is given *before* the service is performed, in *anticipation* of the job being done promptly in a cheerful manner.

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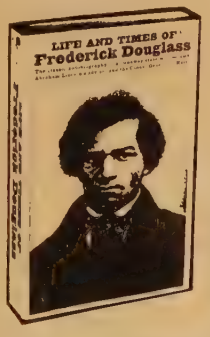
BASIC BLACK BOOKS

by Robert Chrisman and Robert Allen

The following annotated list of black American books is intended to provide the reader with a representative distribution of black information and expression. In addition to literature, history, social commentary and critical works were included. Due to time and space, it was impossible to include all the deserving works from the ranks of black writers and scholars, but we hope that this listing will stimulate and inform the reader, such that all black culture will prosper. Arrangement is chronological.



The Autobiography of Frederick Douglass, Writ by Himself. The first autobiography, written by Douglass shortly after his escape from slavery. Passionate, clear, lyric, concise. Revised later to, **The Life and Times of Frederick Douglass,** 1883, 1962; $2.45 from Collier Books, Macmillan Publishing Co., Order Dept., Front & Brown Sts., Riverside, NJ 08075. Or Whole Earth.

Blacks in Bondage: Letters of American Slaves, Robert S. Starobin. These letters, compiled from archives found in the American South, provide an insight into the reality of slavery, from the point of view of the slave himself—into the special privileges accorded drivers, managers, and house servants; the tragedy of families separated by slave auctions; the desperate and often unsuccessful attempts to escape or rebel; and the joys and problems of "new life" in Liberia. 1974; $3.45 from Franklin Watts, Inc., 845 Third Ave., NY, NY 10022. Or Whole Earth.

Black Reconstruction in America 1860-1880, W.E.B. Du Bois. The best history of the period ever written and perhaps the best history ever written in the United States. Du Bois traces all the strands involved in the aborted liberation of black Americans from 1860-1880. 1935, 1969; $4.95 from Atheneum Publishers, c/o Book Warehouse, Inc., Vreeland Ave., Totowa, NJ 07512. Or Whole Earth.

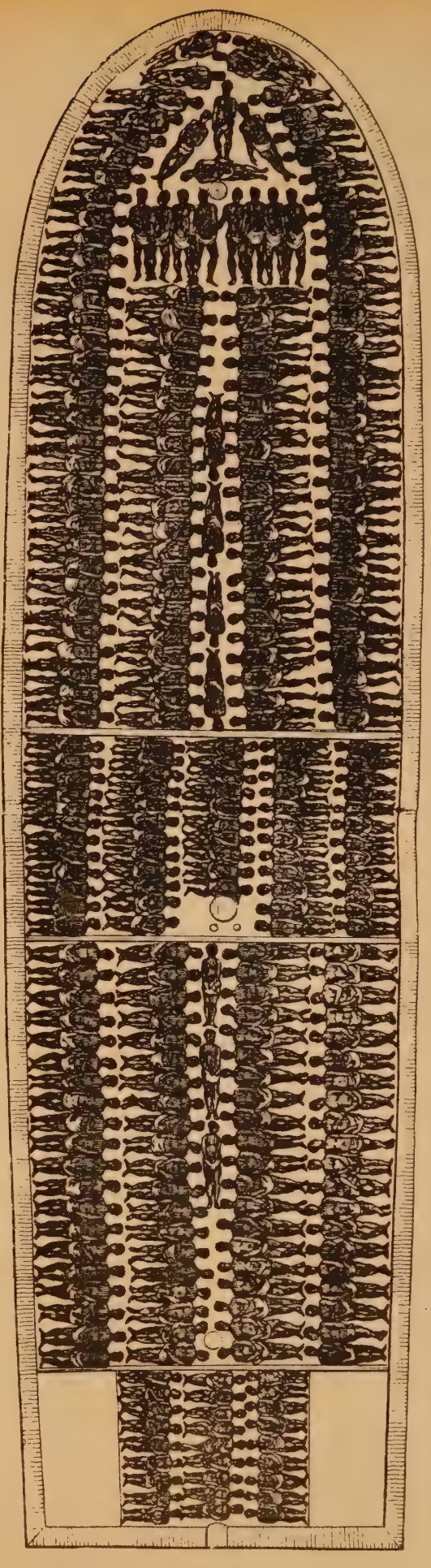
The Souls of Black Folks, W.E.B. Du Bois. Eloquent essays on the black experience: politics, economics, education, culture, personal reflections, ideological differences with the Booker T. Washington school-of thought. Magnificent prose by one of the towering figures of modern Western history. 1903, 1970; cheapest edition $.75 from Fawcett World Library, Crest, Gold Medal & Premier Books, 1515 Broadway, NY, NY 10036. Or Whole Earth. Many other editions available.

The Complete Poems of Paul Laurence Dunbar. Dunbar was a transitional figure in black poetry, spanning the late 19th and early 20th centuries. Dialect poems, classic British oriented verses, and the Negro national anthem, "Lift Every Voice and Sing," are among his range. 1913; $1.95 from Apollo Editions, Inc., 666 Fifth Ave., NY, NY 10019. Or Whole Earth.

Crusade for Justice: The Autobiography of Ida B. Wells. Almost single-handedly Ida Wells launched the anti-lynching campaign in the 1890s, after several of her friends were lynched in Memphis, Tenn. Editor, orator and organizer, Miss Wells toured the U.S. and England denouncing the myth that blacks were being lynched to retaliate for the rape of white women. She showed that lynching in fact was used systematically as a terrorist technique to prevent blacks from achieving economic or political power in the South. A co-worker of W.E.B. Du Bois and William Monroe Trotter, the contributions of this pioneering black woman organizer are only now being recognized. 1972; $3.95 from The University of Chicago Press, 11030 South Langley Ave., Chicago, Ill. 60628. Or Whole Earth.

Selected Poems of Claude Mackay. A fine body of work by McKay, a political activist who participated in the Harlem Renaissance of the 1920's, espoused black pride and black nationalism, and, subsequently, Marxism. 1971; $5.00 from Twayne Publishers, Inc., 31 Union Sq. W., NY, NY 10003. Or Whole Earth.

Philosophy and Opinions of Marcus Garvey, edited by Amy Jacques-Garvey. The political and cultural thoughts of one of the most controversial and respected black nationalist leaders in American history. Though identified with the "Back to Africa" movement, evidence indicates massive organization throughout the United States with emphasis on economic development and black pride. His organization, the U.N.I.A., claimed 2 million active members before Garvey's arrest and conviction on highly questionable charges of fraud. 1925, 1969; $4.95 from Atheneum Pub., c/o Book Warehouse, Inc., Vreeland Ave., Totowa, NJ 07512. Or Whole Earth.



A plan of the slaving ship Brookes *prepared by the Wilberforce Committee in 1790.*

Black Metropolis, St. Clair Drake and Horace R. Cayton, authors. A classic study of black life in Chicago during the 1920's. Along with W.E.B. Du Bois' **The Philadelphia Negro,** this work is a pioneer in black sociology, as well as in developing the demographic method of social research. 1970; 2 volumes, each $2.85 from Harcourt Brace & Jovanovich, Inc., 757 Third Ave., NY, NY 10017. Or Whole Earth.

Selected Poems of Langston Hughes. Langston Hughes. Selections from a writing career that spanned 40 years. Clear, direct poetry directed to the general public and the mass man. High quality. 1959; $6.95 from Alfred A. Knopf, Inc., 457 Hahn Rd., Westminster, MD 21157. Or Whole Earth.

Cane, by Jean Toomer. A highly lyrical collection of stories and sketches based upon a single setting, using Southern black peasants. Famed for the incisive, vivid images, the transformation of action into metaphor. A major stylistic influence on black and white authors since its publication. 1923, 1968; $.95 from Harper & Row General Books, Keystone Industrial Park, Scranton, PA 18512. Or Whole Earth.

Here I Stand, the autobiography of Paul Robeson. Traces the career, political growth and cultural development of Paul Robeson, a black Renaissance man who lettered in 4 sports at Rutgers, graduated magna cum laude, earned an L.L.B. but was denied work as an attorney, due to racism. Hence, his subsequent career as actor, singer and opera star. 1971; $2.45 from Beacon Press, 25 Beacon St., Boston, MA 02108. Or Whole Earth.

Native Son, by Richard Wright. Regarded as the masterpiece of Richard Wright, generally considered as the best black novelist yet. It is a grim naturalistic treatment of a black teenager's doomed battle with the forces of oppression, racism, institutional racism and violence in Chicago's South Side. Also, a pioneer existential novel. 1940, 1969; $.95 from Harper & Row General Books, Keystone Industrial Park, Scranton, PA 18512. Or Whole Earth.

Invisible Man, by Ralph Ellison. A comprehensive treatment of the black quest for identity in a white world which simultaneously never sees black people but is always aware of their presence. Done by tracing the adventures of a Southern young blackman migrating to Harlem: humor, tragedy, surrealism, archetypal symbolism. Brilliant achievement. 1952; $1.95 from Random House, Inc., 457 Hahn Rd., Westminster, MD 21157. Or Whole Earth.

Notes of a Native Son, by James Baldwin. The first collection of essays by Baldwin, rank him as among the best essayists of the 20th Century. Baldwin explores the theme of identity in its many aspects, from childhood in Harlem to self-imposed exile in Europe. Gutty and beautiful. 1955, 1971; $.95 from Bantam Books, Inc., 666 Fifth Ave., NY, NY 10019. Or Whole Earth.

And Then We Heard the Thunder, by John Oliver Killens. Regarded as the dean of black American novelists, Killens probes the dynamics of a black infantry unit during World War II; full scale with broad social scope. 1963; $7.95 from Alfred A. Knopf, Inc., 457 Hahn Rd., Westminster, MD 21157. Or Whole Earth.

Black Bourgeoisie, by E. Franklin Frazier. A classic critique of the behaviors, customs and values of the black bourgeoisie. Frazier's thesis is that the black bourgeoisie's imitation of the white middle class frustrates the development of an authentic black social class and culture. Highly influential book, excellent writing. 1962; $2.95 from The Free Press, Macmillan Pub. Co., Inc., Order Dept., Front & Brown Sts., Riverside, NJ 08075. Or Whole Earth.

The Black Anglo-Saxons, by Nathan Hare. A bold critique of the new black bourgeoisie; witty, insightful, and therapeutic, this book probes the irony of an oppressed black middle class imitating the mores and behaviors of its oppressor, the white bourgeoisie. A key ideological document of the black nationalist movement. 1970; $1.50 from Collier Brs., Macmillan Pub. Co., Inc., Order Dept., Front & Brown Sts., Riverside, NJ 08075. Or Whole Earth.

Stride Toward Freedom: The Montgomery Story, by Martin Luther King, Jr. This is the story of the famous Montgomery Bus Boycott of 1955 which ushered in a new era of Civil Rights activism. King sets out his philosophy of non-violent direct action, which he hoped would save America from a violent racial confrontation. 1958; $.95 from Harper & Row General Books, Keystone Industrial Park, Scranton, PA 18512. Or Whole Earth.

Black Fire: An Anthology of Afro-American Writing, ed. by LeRoi Jones and Roy Neal. A collection of contemporary black writing done in 1968; excellent taste, representative of the black consciousness mood and young talent. 1968; $3.50 from William Morrow and Co., Wilmor Warehouse, 6 Henderson Dr., West Caldwell, NJ 07006. Or Whole Earth.

Soul On Ice, by Eldridge Cleaver. An electrifying collection of essays which hit on the psychological and sociological core of black-white relationships in the United States today. Written mainly while Eldridge was in San Quentin. 1968, 1970; $.95 from Dell Pub. Co., Inc., 1 Dag Hammarskjold Plaza, 245 E. 47th St., NY, NY 10017. Or Whole Earth.

Soledad Brother: The Prison Letters of George Jackson. Written like flame on marble, the passionate precision of Jackson's thought and phrasing is unlike anything else written in the English language in its hard austerity. A work of genius by a major revolutionary ideologue. 1970; $1.50 from Bantam Books, Inc., 666 Fifth Ave., NY, NY 10019. Or Whole Earth.

Black Awakening in Capitalist America: An Analytic History, by Robert L. Allen. A brilliant critique of the significance

of the black nationalist movement and mood, in its relationship to white American capitalism. Allen explores the problems and contradictions between nationalism and revolution on the one hand, and nationalism and capitalism on the other. Also provides excellent analysis of contemporary black politics. $1.95 from Anchor Books, Doubleday & Co., Inc., 501 Franklin Ave., Garden City, L.I., NY 11530. Or Whole Earth.

Home: Social Essays, by Leroi Jones (Imamu Amiri Baraka). Essays tracing Baraka's intellectual, political and psychological development from the late '50's into the late sixties; the development of a black nationalist. $1.95 from William Morrow & Co., Wilmor Warehouse, 6 Henderson Dr., West Caldwell, NJ 07006. Or Whole Earth.

The Autobiography of Malcolm X, Malcolm X & Alex Haley, ed. A modern classic, it is the story of Malcolm's intellectual and political development, covering his childhood struggles against racism in the Midwest, his hustling, pimping and thieving in Boston and Harlem, and the final stages of his political and religious development— when he joined the Nation of Islam, became a national charismatic leader, and subsequently formed his own organization after a falling out with the Nation of Islam. 1965; $1.50 from Grove Press, Inc., Random House, Inc., 457 Hahn Rd., Westminster, MD 21157. Or Whole Earth.

GENERAL REFERENCE

Black American Literature: Poetry, & Black American Literature: Fiction, Darwin Turner. Perceptive and insightful criticism of black American writing by one of the outstanding black literary critics in the United States. 1969; $1.95 each from Charles E. Merrill Pub. Co., 1300 Alum Creek Drive, Columbus, Ohio 43216. Or Whole Earth.

A Documentary History of the Negro People in the United States, Vol. 1 (1661-1910) and Vol. 2 (1910-1932). by Herbert Aptheker. Curator of the late W.E.B. Du Bois documents, Dr. Aptheker's encyclopedic and progressive view of the black struggle in the United States makes this work essential, for informative reading, and reference. 1962; $3.95 each, from Citadel Press, Inc., 120 Enterprise Ave., Secaucus, NJ 07094. Or Whole Earth.

From Slavery to Freedom: A History of Negro Americans, by John Hope Franklin. This is the standard and most comprehensive one-volume history of black people in the

Nat Love, famous cowboy

U.S. It begins with Africa and traces black history through the Civil Rights eruptions of the 1960s. Now in its Third Edition, this book is widely used in high schools and colleges. Franklin, a renowned black historian, is Chairman of the History Department at the University of Chicago. 1967, 1969; $3.95 from Vintage Books, Random House, Inc., 457 Hahn Rd., Westminster, MD 21157. Or Whole Earth.

American Negro Poetry, ed. Arna Bontemps. This edition of the standard anthology of Negro poetry in America is revised and updated. The first edition in 1963 sold close to 200,000 copies. Some new poets included in this revised edition are Bob Kaufman, Richard A. Long, Audre Lord, Larry Neal, Don Lee, Nikki Giovanni, to name a few. 1963, 1974; $4.95 from Hill & Wang, Farrar, Straus and Giroux, Inc., 19 Union Sq. West, New York, NY 10003. Or Whole Earth.

Black Theater, U.S.A., James V. Hatch, Editor, Ted Shine, Consultant. A definitive anthology of black drama and a "testimony to the brilliant accomplishments of black Americans." The forty-five plays included a range from 1847 to the present day and show the development of a vital black dramatic tradition in America. 1974; $19.95 from The Free Press, Macmillan Pub. Co., Inc., Order Dept., Front & Brown Sts., Riverside, NJ 08075. Or Whole Earth.

The Autobiography of Miss Jane Pitmann, by Ernest Gaines. In this, his most celebrated novel, Earnest Gaines reviews 100 years of black history and experience, as told by Jane Pittman, former slave and civil rights marcher. 1971; $1.25 from Bantam Books, Inc., 666 Fifth Ave., NY, NY 10019. Or Whole Earth.

BLACK BIBLIOGRAPHIES

The following are booklength reference works and works on black individuals or aspects of the black experience.

Afro-Americana, 1553-1906. Author Catalog of The Library Company of Philadelphia and The Historical Society of Pennsylvania. Over 11,000 books and pamphlets either by blacks or dealing with black subject matter (with concentration in United States, Caribbean and Africa) are listed; also has over 4,000 unpublished manuscripts. G.K. Hall & Co., 70 Lincoln St., Boston, MA 02111.

Living Black American Authors, A Biographical Directory, Ann Allen Shockely and Sue P. Chandler. A pioneer work, with emphasis on the biographical treatment of living black authors. Also has index of titles. Entries key on occupation, birth data, education, family, work experience, awards, publications and current mailing address of each author. From R.R. Bowker, 300 N. Zeeb Rd., Ann Arbor, MI 48106. Or Whole Earth.

Black Americans in Autobiography, Russell C. Brignano. An annotated bibliography of black autobiographies and autobiographical books written since the Civil War. $5.75 from Duke University Press, 6697 College Station, Durham, North Carolina, 27708. Or Whole Earth.

Famous First Facts About Negroes, by Romeo B. Garrett. Contains many of the famous facts about American blacks from their earliest beginnings in Africa down to the present time; an effort has been made to include only those "firsts" for which there is substantial documentation. Entries are catalogued in alphabetical arrangement with many cross-references. A subject/name index is included. 1972; $7.95 from Arno Press, Inc., 330 Madison Ave., NY, NY 10017. Or Whole Earth.

National Roster of Black Elected Officials, April 1974. This is a census of blacks holding elective office in the United States. In addition to names, the Roster lists with each entry the title of office, the jurisdiction the official represents, a mailing address, and, in many cases, the year in which the current term of office expires. As of April 1, 1974, there were 2,991 black elected officials in the United States. $6.00 from Publications, Joint Center for Political Studies, 1426 H St., N.W., Suite 926, Washington, D.C. 20005. Or Whole Earth.

A comprehensive Annotated Bibliography of American Black English, Ila Wales Brasch and Walter Milton Brasch. Contains descriptions of more than 1,800 books and other publications on Black English. Brings together materials from a wide variety of sources. $15.00 from Louisiana State University Press, Baton Rouge, LA 70803. Or Whole Earth.

Black Press Periodical Directory (annual), Black Press Clipping Bureau, Herb Jaxon, President. This directory lists 559 national and 256 foreign black newspapers, magazines, journals, college newspapers and newsletters. $25.00 from Black Press Clipping Bureau, 78 Merchant St., Newark, NJ 07105.

American Black Women in the Arts and Social Sciences: A Bibliographic Survey by Ora Williams. This bibliography of more than 1,000 entries and close to 2,000 works is designed to acquaint blacks and other Americans with the names and talents of American black women who have made contributions to the various arts and social sciences. $5.00 from Scarecrow Press, Inc., P.O.Box 656, Metuchen, NJ 08840. Or Whole Earth.

Black Image on the American Stage, A Bibliography of plays and musicals, 1770-1970. By James V. Hatch. Contains over 2,000 entries, with an index of titles and an index of authors. Entries meet at least two of the following criteria: written by a black playwright, on a black theme, contains at least one black character, and written or produced in America between 1767-1970. 1970; $8.00 from DBS Publications, Inc., 150 West 52nd St., New York, NY 10019. Or Whole Earth.

Black Press Clipping Bureau. The first bureau of its kind. It provides complete coverage of the national and international black press, 38 states, 159 cities, 35 foreign countries. Covers over 1300 periodicals a month, 300 a week, selected areas available upon request. Write Herb Jaxon, President, Black Press Clipping Bureau, 78 Merchant St., Newark, NJ 07105

BLACK NEWSPAPERS

MUHAMMAD SPEAKS, 2548 S. Federal St., Chicago, IL 60616. Published weekly. Single copies 25 cents. Subs $13.00 a year. Comprehensive news coverage of black and black related events throughout the U.S. and the world; excellent writing and photos, mass circulation, tabloid size. Official publication of the Nation of Islam (Black Muslims).

Photo by Vance Allen in **The Black Photographers Annual** *1973, $5.95 from Light Impressions, Box 3012, Rochester, NY 14614.*

THE BLACK PANTHER, 8501 East 14th St., Oakland, CA 94621. Published weekly. Single copies 25 cents. Subs $8.75 a year. Tabloid size newspaper; official publication of the Black Panther Party; good in-depth coverage of major issues and crises affecting the black community; reports from third world countries.

AFRICAN WORLD, Student Organization for Black Unity, Box 20826, Greensboro, NC 27420, $3.75/yr. Good interpretive news reporting, with ideological essays as well. Fine newspaper, radical perspective; tabloid size.

BLACK NEWSLETTERS

AFRICA NEWS, Box 3851, Durham, NC 27702. Published twice weekly. Subs $75.00 for six months. This is a comprehensive news service reporting on current political and cultural events in Africa. Based on monitoring short-wave radio broadcasts from 10 African and European nations. Reliable and fast.

TRICONTINENTAL NEWS SERVICE, 30 East 20th St., New York, NY 10003. Published every two weeks. Single copies 75 cents. Subs $12.00 a year. Provides news, features and documents direct from Asia, Africa and Latin America.

RACE RELATIONS REPORTER, Box 12156, Nashville, TN 37212. Published 18 times a year (plus six issues in magazine format). Subs $10.00 a year. Published by the Race Relations Information Center, a non-profit agency. News and in-depth features dealing with blacks and other racial minorities, chiefly in the South and Southwest.

IBW MONTHLY REPORT, 87 Chestnut St., S.W., Atlanta, GA 30314. Published by the Institute of the Black World, a leading black "think tank." The Monthly Report contains commentaries on black issues and news briefs. It is distributed free of charge.

AFRICAN AGENDA, P.O. Box 1941, Chicago, IL 60690 Published monthly. Single copies 20 cents. Subs $2.00 a year. Essays and commentary on the struggle for African liberation.

JCPS NEWS, 1426 H Street, N.W., Washington, D.C. 20005 Published periodically by the Joint Center for Political Studies. No charge. The JCPS is a non-profit agency that keeps tabs on the status of black elected officials around the country, and federal government programs affecting black people. Reliable data presented in a simple format. JCPS also maintains a roster of all black elected officials in the U.S.

THE GIBSON REPORT, 475 Fifth Ave., New York, NY 10017. Published monthly. Subs $25.00 a year. This is a business newsletter covering the black and minority consumer market, employment patterns, etc.

CHAMBA NOTES, P.O. Box U, Brooklyn, NY 11201. This is a bi-annual newsletter that focuses on black activity in

m, TV and other media. It is published by the Chamba rganization, an independent black film company.

BLACK PERIODICALS/JOURNALS

LACK BOOKS BULLETIN, issued four times a year; egularly features interviews, reviews of black books for adults nd children, news from black publishers, a continuing ibliography of books by and about black people and articles f social/political commentary, Institute of Positive Education, 48 So. Ellis Ave., Chicago, IL 60619, $8.00 per year.

HE BLACK SCHOLAR, P.O. Box 908, Sausalito, CA 94965. blished ten times a year. Single copies $1.50. Subs: 1 year, 2.00; 3 years, $30.00. Founded in 1969 by Nathan Hare d Robert Chrisman. Contemporary, timely and historical, e Black Scholar has emerged as the cutting edge of black ought today. Each issue contains provocative essays by tstanding black scholars, movement theoreticians and street tivists.

ACK WORLD, 820 S. Michigan Ave. Chicago, IL 60605. blished monthly. Single copies 50 cents. Subs $5.00 per ar. Contains fiction, poetry and essays on black culture; od notes on cultural happenings.

REEDOMWAYS, 799 Broadway, New York, NY 10003. blished quarterly. Single copies $1.25. Subs $4.50 per ar. Radical perspective, with fiction, essays, occasional awings and poems. Excellent book notes.

YLON, Atlanta University, Atlanta, GA 30314. Published arterly. Single copies $2.00. Subs $7.00 a year. Founded W.E.B. Du Bois in 1939, this academic periodical discusses pects of race relations in terms of traditional disciplines. lid articles.

HE REVIEW OF BLACK POLITICAL ECONOMY, 112 W. 20th St., New York, NY 10027. Published quarterly. Single pies $2.50. Subs $10.00 a year. Progressive publication, in-pth theoretical articles on black economic development.

OURNAL OF NEGRO HISTORY, Association for the Study Negro Life and History, Inc., 1407 14th St., Washington, C 20005, $10.00/yr. Founded by the great black historian rter G. Woodson and published by the Association for the udy of Afro-American Life and History, this is the ndfather of black scholarly journals.

Jack Johnson

JOURNAL OF NEGRO EDUCATION, Howard University Bureau of Educational Research, Washington, D.C. 20001, $5/yr. Another pioneer in black scholarship; traditional pproaches and research concerning black education.

THE CRISIS, Crisis Publishing Co., 1790 Broadway, New York, NY 10019, $3.50/yr. Official publication of the NAACP, this journal was founded and edited by W.E.B. Du Bois for over 20 years. Depending on NAACP action, editorial line fluctuates.

JOURNAL OF BLACK POETRY, P.O. Box 771, San Francisco, CA 94101. Single copies $1.50. Subs $6.00 a year. Specializes in black poetry and critical essays; consistently high quality.

BLACK BOOKSTORES

Looking for books by or about black people? Here is a list of some black bookstores around the country that can help you.

Frederick Douglass Book Store
49 Massachusetts Ave.
Boston, MA 02115

Vaughn's Bookstore
12123 Dexter Ave.
Detroit, MI 48206

Uhuru Market
P.O. Box 15321
Cincinnati, OH 45237

House of Cooperative Economics
55 Springfield Ave.
New York, NY 10031

Afroamerican Book Center
532 West 145th St.
New York, NY 10031

Liberation Book Store
421 Lenox Ave.
Harlem, NY 10037

Richardson's Afro-American Bookstore
734 Nostrand Ave.
Brooklyn, NY 11216

Written Word Book Store
89-61 165th St.
Jamaica, Queens, NY 11432

New World Book Fair
113 South 40th St.
Philadelphia, PA 19104

Robin's Book Store
6 North 13th St.
Philadelphia, PA 19107

Uhuru Kitabu
6031 Germantown Ave.
Philadelphia, PA 19144

Drum and Spear Bookstore
2701-A 14th St., N.W.
Washington, D.C. 20013

Timbuktu Books
453 Mitchell St., S.W.
Atlanta, GA 30313

The Book Mark
10011 Euclid Ave.
Cleveland, OH 44106

Afro-American Workshop
1654 Broadway
Indianapolis, IN 46202

Ellis Book Store
6447 S. Cottage Grove
Chicago, IL 60637

House of Negro History
3014 Union Ave.
St. Louis, MO 63115

The Hub Bookstore
2103 North 5th St.
Kansas City, KS 66101

Afro-American Book Distributors
2537 Prospect
Houston, TX 77004

Sundiata Books
2878 Colorado Blvd.
Denver, CO 80207

Hugh Gordon Book Store
4509 S. Central Ave.
Los Angeles, CA 90011

Aquarian Spiritual Center
1302 W. Santa Barbara Ave.
Los Angeles, CA 90037

Afro-American Book Store
1708 Atlantic Ave.
Long Beach, CA 90813

Marcus Books
540 McAllister St.
San Francisco, CA 94102

New Day Book Store
631 Divisadero
San Francisco, CA 94117

BLACK PUBLISHING HOUSES

This is a partial listing of black owned or black-controlled publishing houses that produce works by black authors and/or works of relevance to the black experience. Books, mainly.

Afro-Am Publishing Co.
1727 South Indiana Ave.
Chicago, IL 60616

African World Distributors
28½ E. 33rd St. No. 2A
New York, NY 10016

Associated Publishers
1407 14th St. N.W.
Washington, DC 20005

Black Academy Press
135 University Ave.
Buffalo, NY 14214

Black Star Publishers
8824 Finkle St.
Detroit, MI 48200

Blyden Press
Box 621
Manhattanville Station
New York, NY 10027

Broadside Press
12651 Old Mill Pl.
Detroit, MI 48238

Free Lance Press
5000 Grand Ave.
Cleveland, OH 44104

Free Southern Theatre
1716 N. Miro St.
New Orleans, LA 70119

Howard University Press
Notre Dame Hall
2935 Upton St. N.W.
Washington D.C. 20008

Jihad Productions
P.O. Box 663
Newark, NJ 07103

Johnson Publishing Co., Inc.
1820 South Michigan Ave.
Chicago, IL 60616

New Beacon Books Ltd.
2 Albert Rd.
London, N4 3RW
United Kingdom

Buckingham Learning Corp.
76 Madison Ave.
New York, NY 10016

Drum and Spear Press
1902 Belmont Rd. N.W.
Washington, DC 20009

DuSable Museum of African-American History Press
3806 S. Michigan Ave.
Chicago, IL 60653

East African Literature Bureau
Headquarters of the Bureau
East African Community
Nairobi, Kenya

East African Publishing House
Uniafric House
Koinage St.
P.O. Box 30571
Nairobi, Kenya

Emerson Hall Publishers, Inc.
209 West 97th St.
New York, NY 10025

Free Black Press
7850 S. Cottage Grove Ave.
Chicago, IL 60619

New Dimensions Publishing Co.
151 West 25th St.
New York, NY 10001

New Pyramid Productions, Inc.
Box 835
Chester, PA 19016

Oamuru Press, Inc.
161 Madison Ave. No. 2A
New York, NY 10016

Pan-African Center for Education Materials, Inc.
Box 1632
Durham, NC 27702

Julian Richardson Associates
540 McAllister St.
San Francisco, CA 94102

The Third Press
444 Central Park West
New York, NY 10025

Third World Press
7850 South Ellis Ave.
Chicago, IL 60619

Vibration Press
P.O. Box 18152
Cleveland, OH 44108

FOUNDATIONS

Some foundations which have made substantial contributions to black organizations and programs.

Taconic Foundation
745 5th Ave.
New York, NY 10022

Rockefeller Brothers Fund
30 Rockefeller Plaza
New York, NY 10020

The Ford Foundation
320 E. 43rd St.
New York, NY 10017

The Field Foundation
100 E. 85th St.
New York, NY 10028

Photo by Shawn Walker in **The Black Photographers Annual 1973.**

New York Foundation
4 W. 58th St.
New York, NY 10019

New World Foundation
100 E. 85 St.
New York, NY 10028

National Endowment for the Humanities
Washington, D.C. 20506

Cummins Engine Foundation
301 Washington
Columbus, IN 47201

The Cleveland Foundation
National City Bank Bldg.
Cleveland, OH 44114

The Carnegie Corporation of New York
437 Madison Ave.
New York, NY 10022

ACCESS TO CHINA

BY ORVILLE SCHELL

INTRODUCTION

China has been a problem for the United States. More often than not our perceptions of that country have been distorted beyond all measure by our own fears and weaknesses. For the last thirty years we Americans have viewed China as "Red China", peopled by demonic communist "blue ants", led by a sinister leadership whose sole motivation was world conquest.

Our own hang ups about "communism" and the red menace were played upon by ambitous politicians like Richard Nixon, Senator Joseph McCarthy and William Knowland whose red baiting created a climate of fear and paranoia which almost completely eclipsed our ability to see China in her own right; to see and understand one of the great social and political experiments of all time.

Some of that fear has ebbed. We begin to be able to see China less as a threat and enemy, and more as a tremendously hopeful society which has chosen to go about the process of living in a way almost completely different from our own. For many, the Chinese have become an example of an alternative way of dealing with problems of modern life. The old questions of foreign policy, China as an "aggressive" nation ready to gobble up Asia, and China as a retarded repressive communist dragon have receded from view. China as a nation with a different way of handling health care, the environment, women, agriculture, housing, industry, transportation, energy, etc., is beginning to come to the fore. And emerging from behind the mountain of irrelevant trivia that cold war stricken authors wrote about China, is a slowly growing collection of excellent and informative books and material available to everybody. One does not need to be an "expert" to understand China.

BACKGROUND BOOKS

China is an old country. Its historical legacy to the present is a deep one. The years between 1921, when the first communist party was set up in China, and 1949, when Mao Tse-tung marched triumphantly into Peking at the head of the People's Liberation Army were long and tumultuous. It was during these years that the communist tried, failed, succeeded, learned and fashioned the politics and life style which has made China what it is today. The present is difficult to understand without some sense of that past and the seemingly insurmountable problems which the Chinese have overcome.

Note: all books preceded by asterisks can be ordered directly. For others, check nearest library, big bookstores, or write directly to the publisher.

* **The China Reader** (by Franz Schurmann and Orville Schell, Vintage, paper back. (Vol. 1, 287 pp., $2.40) (Vol. II, 369pp., $2.40,) (Vol. III, 647pp., $2.95) provides a good sweep of how it all began. The first volume covers Imperial China and deals with the old Confucian system under dynastic rule. The second volume picks up in 1911 after the fall of the Manchu Emperor Dowager and follows Chaing Kai-shek's disasterous reign of corruption and gloom, and the growth of Mao's guerrilla army in the hills. The third volume covers Communist China from 1949 through 1966. (There is a fourth volume just out on the Cultural Revolution by Nancy and David Milton, and Franz Schurmann). These volumes are composed of translations, magazine articles, poems, essays, book chapters, reports and explanatory introductions. They are quite readable and enable the reader to dive in at almost any point and read for a while. They cover a little bit of everything and should give the novice as well as the pro something to think about.

They all look alike, though differing in height; some being very tall. My present idea of them is ugliness and stiff angular demeanor, perhaps due to ungainly garments... Their cheeks are hollow and white, though occasionally purple. Their noses are like sharp beaks which we consider unfavorable. Some of them have thick tufts of hair, red and yellow, on their faces making them look like monkeys. Their arms and ears do not reach the floor as they are depicted by us. Though sleepy looking, I think they have intelligence...

—(One of the first Chinese accounts of white men by scholar, Hwuy-ung)

Edgar Snow first went to China in the 1930's. Since then he has written many books. Almost every single one deserves a rave. Not only are they warm, human and interesting, but Snow was one of those men who never sold out. His love for the Chinese and his sense that they were up to something more positive than world domination made his life difficult in the fifties and early sixties. These were the years when writers, politicians and artists were smeared relentlessly for anything positive that they might say about China. Rather than capitulate to the witch hunt, Snow left the country. They were lean years, but he kept writing.

* **Red Star Over China**, (Grove Press, paper, 1961, 543pp., $2.95) is the story of Snow's trips behind Communist lines in 1936. He was the first American journalist to interview Mao and visit the communist capital at Yenan. His account of how the communists fought, lived, and survived is equalled by none. It's a classic. Exciting. Hard to put down.

* **Journey to the Beginning**, (Vintage, paper, 1972, 423pp., $2.45) sports a cover showing a picture of young Snow standing with Mao Tse-tung in Yenan almost 40 years ago. Since then Snow met with Mao many times in what was surely one of the most curious and special relations in Sino-American history. Snow also met with Chou En-lai, Nehru, Ghandi, Roosevelt and a host of other people during his long career. But most interesting are his seemingly endless roamings around China and his contact with Chinese and foreigners from every walk of life. The book tells a tremendous amount about China and is probably one of the most interesting biographies I've ever read.

* **The Other Side of The River; Red China Today** and **The Long Revolution** are works written after later visits to China after 1960. All interesting and well written, although somewhat less current.

All men must die, but death can vary in its significance. The ancient Chinese writer Szuma Chien said, "Though death befalls all men alike, it may be heavier than Mt. Tai, or lighter than a feather! To die for the people is heavier than Mt. Tai, but to work for the fascists and die for the exploiters and oppressors is lighter than a feather."

—(Mao Tse-tung, 1944)

* If you're in a hurry and want to get a short whirl through the last hundred years of China, (from the Opium Wars, when westerners first attempted to smash their way into China), to the communist years, try, **Modern China: The Story of a Revolution**, by Orville Schell and Joe Esherick, (Vintage Sundial, paper, 1972, 143pp., $1.50). It should give you some sense of what the word "revolution" means in China; how Mao built his movement out of the weakest rather than the most powerful, out of the poorest rather than the richest, out of the least educated rather than the best educated. In short, it tells the story of the transformation of the Chinese peasant and Chinese society.

* White men have been arrogantly writing books about the Chinese for a long time. Their views have usually been passed around as the last word. One is never quite sure if one is learning about the chaos inside of some professor's head, or China, when one ventures into many of these tomes. How have the Chinese seen themselves for the last 100 years? **A Chinese View of China**, edited by John Gittings, (Pantheon, paper, 216pp., $1.95) is a tidy and interesting excursion through Chinese history from Chinese translations. Beautiful graphics.

You, O King, live beyond the confines of the many seas. Never the less, impelled by your humble desire to partake of the benefits of our civilization, you have dispatched a mission... Your envoy has crossed the seas and paid his respects at my Court on the anniversary of my birthday. To show your devotion, you have also sent offerings of your country's produce...

Swaying the wide world, I have but one aim in view, namely to maintain a perfect governance and to fulfill the duties of the State; strange and costly objects do not interest me. If I have commanded that the tribute offering sent by you, O King, are to be accepted, this was solely in consideration for the spirit which prompted you to dispatch them from afar. Our dynasty's majestic virtue has penetrated into every country under heaven, and kings of all nations have offered their costly tribute by land and by sea. As your Ambassador can see by himself, we possess all things. I set no value on objects strange or ingenious, and have no use for your country's manufactures. This then is my answer to your request.

—(The Ch'ien Lung Emperor's response to King George III after British Ambassador, The Earl of Macartney's request that an English Ambassador be allowed to live in Peking)

*Not to be forgotten, are the writings of Chairman Mao himself. At first, they may seem overly didactic, cold and doctrinaire. But Mao's intention was not to amuse people with frivolity. His writing has been a life long attempt to provide a new political and intellectual framework through which the Chinese can view themselves and the world. Some call it a methodology; a way of making sense out of things and analyzing problems. Mao has given China common language and common perspective. In China it is called Mao Tse-tung Ssu-hsiang, or, Mao Tse-tung thought. Mao sees the ability to think and analyze as the key to human efficacy. His Thought has, in effect, given the peasant and common man a way of overcoming problems. Powerful medicine. Particularly if you believe, as does Mao, that thought must lead to action. As he has so candidly put it, "Pure thought without practice (action), is no better than horse shit."

* The "little red book", **Quotations From Chairman Mao**, (Foreign Languages Press, 321 pp., 1966) comes in scores of languages and costs $.60. It's divided very practically into chapters (Discipline, Serving the People, Women, People's War, etc.) Once you get into it and begin to understand what Mao is about, the "little red book" becomes a very sage compendium.

On what basis should our policy rest? It should rest on our own strength, and that means regeneration through one's own efforts... We stand for self-reliance.

—(Mao Tse-tung, 1945)

* For those who would like to dive in deeper, try, **The Selected Works of Mao Tse-tung**, (Foreign Languages Press, 4 vols: Vol. I 1926-37, 347 pp., Vol. II 1937-41, 468 pp., Vol. III 1941-45, 340 pp., Vol. IV 1945-49, 45 pp.) This is the deluxe tour of the inside of Mao's head. Each of the four volumes is paper back, and costs $2.75.

*Six Essays on Military Affaires, (Foreign Languages Press, 393 pp., 1963, red plastic, $1.25) is available for all those who are into the field. It contains his most important articles of the subject by this founder of guerrilla warfare. His individual articles are also available for $.25—$.60 each in small pamphlet form.

We should support whatever the enemy opposes and oppose whatever the enemy supports.

—(Mao Tse-tung, 1939)

* For those who would like to read a biography of Mao, you might try, **The Morning Deluge**, by Han Suyin (Little Brown, 571 pp., 1972, hard back, $12.95).

Photographs by Bob Kass, California Federation of Teachers Delegation

An experienced worker at the Shanghai Machine Tool Plant shows a young worker how to use equipment. Before going on to college or technical school, young people must spend at least two years learning from workers and peasants.

Some Basic Facts About China, is a short inexpensive booklet published in Peking by the editors of **China Reconstructs**. It's an excellent introduction for anyone wondering about how basic institutions in China work; i.e., communes, schools, medical care, women's liberation, taxes etc. (**China Reconstructs**, 1974, 91pp., paper, $.45).

THE THIRTIES AND FORTIES

These years were the real period in which modern China incubated. Death and birth were simultaneous processes: Chiang and the Nationalists dying. Mao and the communists being born. Strangely, this was the period when some of the greatest clarity on the subject of China was evidenced by Americans. Joe McCarthy was still in the future. People reported what they saw and felt. There was no fear. Even US government officials had their eyes open and spoke the truth without a lot of pseudo-political science lingo and lies.

John Service was such an official. He spoke Chinese, and was raised in China. He worked in the Foreign Service and spent part of the war years with the U.S. Observer Mission in Yenan with Mao. His reports were lucid, perceptive, engrossing and honest. He reported what he saw. He lost his job. He was called a commie. It screwed up his life. But he fought it all the way.

At last his reports about what he saw in China on the eve of Mao's takeover have been published. They are incredibly interesting. For they show that it was American fear of communism, not Mao's implacable hatred or opposition to the US which set us off on almost thirty years of opposition and war. If you're interested in how the nightmare began, read **Lost Chance in China, The World War II Dispatches of John Service**, edited by Joseph Esherick, (Random House, 1974, 399 pp., $12.95). (Paper edition out soon.)

(The Communists) are displaying a degree of initiative and planning ability which I have never before encountered in China... Their manners, habits of thought, and direct handling of problems seem more American than Oriental... There is no war weariness... There is surprising political consciousness... There is no feeling of restraint or supression ... The leaders make excellent personal impressions. The Military men look and act like capable military men... The Communist Party because of the struggle it has had to continue, has kept its revolutionary character, (and) has grown to a healthy moderate maturity. One can not help coming to feel that this movement is strong and successful, and that it has such drive behind it and is tied so closely to the people that it will not easily be killed.

—(John S. Service, U.S. Foreign Service Officer after returning from Mao's Yenan in 1944)

Stilwell and The American Experience in China, by Barbara Tuchman (Macmillan, 621 pp., 1970, $10.00) is a fine account of General "Vinegar Joe" Stilwell's years in China during the war. Stilwell was one of our more outspoken emmissaries to China. His diary, **The Stilwell Papers**, Ed. by Theodore H. White (Shocken, 260 pp., 1972, paper $3.95) is an incredibly funny, outrageous and informative account of the war years. Stilwell was the China-Burma Theatre Commander and had the unenviable job of dealing with Chiang Kai-shek's corrupt and venal government, which he referred to as "the manure heap." Stilwell's inclination was to send some American aid to Mao's forces in the hills; the only force in China at the time fighting the Japanese. Chiang nixed the aid and won the title of "The Peanut" from Stilwell. The man was no Westmoreland!

* **China Shakes the World**, by Jack Belden (Monthly Review, 1970, 324 pp., $3.95) was originally written in the 1940's. It is a very interesting account by an American journalist and merchant seaman who travelled around China during the last years before the communist take-over. It is a book about peasant suffering, bureaucratic madness, starvation, corruption and the violence which often accompanied the desperate attempts of peasants to sieze land.

I have faith in the Chinese soldiers and the Chinese people: fundamentally great, democratic, misgoverned. No bars of caste or religion... Honest, tolerant, friendly, courteous.

I judge the Kuomintang (Nationalists) and the (Communists) by what I saw:

Kuomintang: Corruption, neglect, chaos, taxes, words and deeds: Hoarding, black market, trading with the enemy.

Communists:... reduce taxes, rents, interest. Raise production and standard of living. Participate in government. Practice what they preach.

—(General "Vinegar Joe" Stilwell, 1944)

* **Thunder Out of China**, by Theodore White and Annalee Jacoby (William Sloane Associates, 1946, 330 pp., out of print) was one of those few books on China which held me spellbound from beginning to end when I first read it. It is an incredible book by two journalists who watched China suffer during the war. Their descriptions of the great Honan famine, the stink and slime of wartime Chungking, the unimaginable incompetence and corruption of the wallowing Nationalist Government, make the rapid and complete rise of the communist alternative all the more understandable.

COMMUNIST CHINA

Things began to change extremely rapidly in China after the Communists took over in 1949. That was a big year.

There has been an endless avalanche of general books on Communist China. Our President Richard Nixon's ping pong diplomacy opened a flood gate of American visitors to China. Almost every one has written a book. Unfortunately there are too many of them and most are insipid. A few are worth mentioning.

* **Daily Life in Revolutionary China**, by Maria Macciocchi, (Monthly Review, 1973, paper, 506 pp., $3.95) is a very chatty account of Chinese life during the Cultural revolution. Ms. Macciocchi is a Communist member of the Italian Chamber of Deputies and, while she may have her own biases, they are refreshingly unlike those of most Americans. (I was going to say Unamerican!) Lots of conversations, interviews, description.

* **Daily Life in People's China**, by Arthur Galston and Jean S. Savage (Crowell, 1973, hardback, 255 pp., $6.95) is an account by an American scientist, his wife and daughter who lived and worked in China on a commune. Good introductory book. Talks about family life, wages, food, health care, communes, factories, social life.

China is so vast, we have found that we can not do everything from the center.

—(Kuo Mo-jo, President of the Chinese Academy of Sciences, 1971)

* **China: Inside the People's Republic**, by the Committee of Concerned Asian Scholars, (Bantam, 1972, paper, 431 pp., $1.50) was written collectively by a group of young China scholars who were among the first Americans to go to China. Many spoke Chinese. They took the tour: factories, communes, arts, cities, interview with Chou En-lai. Interesting. Readable.

* **The China Reader, Communist China**, by F. Schurmann & O. Schell (Vol. III, Vintage, 647 pp., paper, $2.95), **The China Reader, People's China; The Cultural Revolution and After: 1966-72**, by Milton Schurmann (Vintage, 523 pp., 1974, paper, $3.45), both provide a broad and thorough sweep of China since the communist takeover through documents, articles, translations, book chapters, etc. (See "Background Books".)

It's all experimental. We're trying to make universities more in touch with our country and its needs. We are trying to make them socialist– the door open to anyone, and doing work that will serve workers, peasants and soldiers. But what the future holds is unclear. When you're on a new road you just don't know what is around the corner.

—(P'u Chih-lung, Professor of biology, 1971)

AGRICULTURE

Farming is the heart and soul of China. Agriculture not only feeds the people, but generates the capital for industry. How to farm, and who owns the land have been the two single most important issues throughout Chinese history. The question of land-use and ownership were matters of first priority to the Communists. From the very beginning they espoused and experimented with various land reform programs, which sometimes led to uncontrolled violence as starving landless peasants turned on land lords, killed them and took back the land. At other times confiscation was more orderly. The passions on both sides were deep. The historical relation between the rich landlords and poor tenant peasants was a long and bitter one. It was not a system that changed quickly or easily. But it did change in a way unparalleled in history. And the restitution of the land to those who farmed it created a profound social change; peasants no longer worked for someone else, but for themselves.

The question of land reform has been one almost completely ignored in this country. And yet it seems elemental in a situation such as our own as more and more family farms collapse, agroindustrial corporations flourish and food quality is sacrificed to profits and efficiency. The Chinese experience in land reform was cataclysmic. But the message was clear; a nation's relation to its land and the manner in which it grows its food both have a profound impact on its politics.

* **Land and Labor in China**, by the English economic historian R.H. Tawney (Beacon, 1966, paper, 201 pp., $1.95) is a fine old book written by a man who knew how to write as well as play historian. Tawney describes the agricultural mess that China was in while he was there in the 1930's. The chapter headings read like tombstone inscriptions, "Poverty, War and Famine", "Land Tenure", "Drought and Flood". This thin book will give you a good sense of pre-communist China; a nation where the land itself seemed on the brink of surrender.

In Kansu (Province)... one third of the population has died since 1926, owing to famine, civil war, banditry and typhus. There are districts in which the position of the rural population is that of a man standing permanently up to the neck in water, so that even a ripple is sufficient to drown him.

—(R. H. Tawney, 1932)

* **Earthbound China: A Study of Rural Economy in Yunnan**, by Fei' Hsiao-tung and Chang Chih-I (Routledge & Kegan Paul, London, 1948, 313 pp., out of print) is one of those books that we can only hope will come back in print. The authors describe in meticulous detail a typical peasant village and its farming in the South Chinese Province of Yunnan. What they describe is the pre-communist land reform world of peasant agriculture which had changed little over the centuries. They talk about land holding, tenancy, marketing, cottage industry, planting techniques, crop choices, the farm calendar and village life. The book is, in essence, the story of how a simple agricultural community scratched a living from the ground. The perimeters, as always, were insufficient land, coupled with a land holding pattern where the rich landlords held the lion's share, leaving the rest of the population to the tyranny of the landlord or death.

Land is the issue in **Earthbound China**. Plus change, plus c'est la meme chose.

* **A Chinese Village**, by Martin C. Yang (Columbia University, 1965, (orig. publ. 1945), paper, 263 pp., $2.25) is an anthropological study of Taitou village, in the northern Chinese province of Shantung. The author was born and raised in this village. He describes the people, agriculture, the family, ceremonies, child training, village conflicts and the way in which such villages fitted into the larger mosaic of Chinese rural life. Yang is most interested in how the traditional Chinese village hangs together as a unit.

Living as we do in the midst of a society, where village and community are being eviscerated by various non-oriental dragons like progress, one can not help but read **A Chinese Village** and feel a sense of loss. The average peasant worked hard, was poor, and perhaps perished in a system so stacked against him that survival itself was in question. But he did live within a context which could provide him basic social sustenance. Instead of television sets, he had family and village.

A revolution is not a tea party, or writing an essay, or painting a picture, or doing embroidery; it can not be so refined, so leisurely and gentle, so temperate, kind, courteous, restrained, and magnanimous. A revolution is an insurrection, an act of violence by which one class overthrows another.

—(Mao Tse-tung, 1927)

* **Fan Shen**, by William Hinton (Vintage, 1971, paper, 637 pp., $2.95) is one of the most interesting and significant books on China in the English language. In Chinese, Fan Shen means literally "to turn over the body." This book is the story of a village, Long Bow, which "turns over" in the late forties through the bloody expropriation of land from the landlords.

Hinton tells of the process whereby the peasants of Long Bow slowly got their courage up, took back the land by killing a landlord, and then slowly pieced the small plots together in a more rational and sensible system of cultivation. Don't miss this one, farmers of America. You'll never be the same afterwards: "Land Reform"... could it happen in America?

The ruthless way in which the slightest defiance on the part of the tenants and laborers was supressed over the years, created in the peasant a deep, almost instinctive reluctance to mount an attack against the power of the gentry. Revolt after revolt had been crushed during the 20 centuries of gentry rule. Those who had raised their heads to lead them had either been bought off or had their heads severed. Their followers had been cut to pieces, burned, flayed or buried alive. Gentry in Taihang proudly showed foreigner visitors leather articles made from human skin. Such events and such mementos were part of the cultural heritage of every peasant in China.

—(Bill Hinton, 1948)

Photoworld

Students volunteering to fight in Korea.

* **Iron Oxen**, also by William Hinton (Vintage, 1971, paper, 245 pp., $1.95), is the story of one of the early communist collective farms in China. The iron oxen (T'ieh niu) are tractors. Hinton worked on one of China's first mechanized State Farms as a tractor mechanic and teacher, in a land reclamation project. He describes the perserverence of the peasants as they learned about the tractors for the first time. One is struck by their commitment to the idea of "self-sufficiency," an idea repeatedly stressed then and now as a cardinal virtue.

Many people in this country who have experimented in communal living and collective work arrangements will find the sections where Hinton describes the endless meetings and the manner in which the Chinese criticized one another and dealt with one another's weaknesses as most interesting. Criticism was often plentiful and biting. But rarely did it seem to pierce in a hurtful calculated way, or to wound the pride or ego of the offender. Criticism on this farm seemed to serve the function of pointing up ways in which each person could serve himself and others better against a common danger.

This is a fascinating book. While it will not tell budding farmers much about agricultural techniques, it does tell a lot about how the Chinese work together to make things grow.

Conscientious practice of self criticism is still another hallmark distinguishing our Party from all other political parties. As we say, dust will accumulate if a room is not cleaned regularly; or faces will get dirty if they are not washed regularly. Our comrades' minds and our Party's work may also collect dust and also need sweeping and washing. The proverb, "Running water is never stale, a door hinge is never worm eaten," means that constant motion prevents the inroad of germs and other organisms.

—(Mao Tse-tung, 1945)

* **The Transformation of the Chinese Earth**, by Keith Buchanan, (Praeger, 1972, hardback, 336 pp., $12.50) tells the story of how the Chinese succeeded in eliminating hunger in China through land reform, collectivizing fields, communizing the peasantry, much hard work and an innovative spirit.

In truth, there has been very little written in English on practical problems; Chinese methods of composting, fertilizing, (they are using an increasing amount of chemical fertilizer), planting, tilling, crop varieties or pest control. Out of necessity they have been very conscious of re-using all human and animal waste for agriculture. One of the slogans, "All waste is treasure," expresses a healthy respect for the power of livestock manure and sludge from sewage treatment. Many large cities are surrounded by agricultural belts to which nutrient-high treated sewage waste water is pumped and used for irrigation. (See "Environment.")

Mechanization of agriculture is still in the early stages. Just how far they will push it in view of their vast supply of inexpensive manual labor is unclear. But it is unlikely they will carry it to the extremes we have in this country where it has deprived an ever growing number of agricultural laborers of their jobs. In China the emphasis is on solving human problems rather than garnering profit.

In any event, the collectivization of agriculture has allowed for the combining of the millions of small private plots (often no larger than a room) into larger fields and paddies which lend themselves to mechanized tilling, planting and harvesting. All land, except small household plots, is farmed collectively in China. There is no private property. (There is a good section on the collectivization of agriculture in **The China Reader; Communist China**, Vol III (pp. 170-192.)

Other sources on the more practical problems in Chinese farming can be found in frequent articles in the magazine **China Reconstructs**, and less frequently in the **Peking Review**. (See "Magazines and Periodicals.")

Organic Gardening Magazine (published monthly by Rodale Press, 33 East Minor St., Emmaus, Penna. 18049. $5.85 per year) also has carried several articles on Chinese agriculture. The Magazine's Editor, Robert Rodale, took a trip to China and has written several articles (see Vol. 20, no. 6, June 1973, "Walking Through China's Garden").

ENVIRONMENT

Almost unbelievably, there has been no book written on how the Chinese approach their environment. Their approach has been unique, and in many ways presents a very hopeful alternative model. China is a poor country, and has always born the necessity of frugality. But they have gone farther, and transformed frugality into a virtue as well. They have placed great emphasis on what they call "comprehensive use"; using every part of every natural resource in any industrial process. They have no private transportation. They encourage low levels of individual consumption; washers, TVs, radios, farm equipment, machines, refrigerator units etc. are all shared. Factories, as a matter of economics are encouraged to find ways to process wastes into usable products. In short, China is a nation in which "waste" as a reality and a concept is almost non-existent.

Wherever we happen to be, we must treasure our manpower and material resources, and must not take a short view and indulge in wastefullness and extravagance.

—(Mao Tse-tung, 1945)

Marc Riboud

An industrialist and his wife, who decided to stay when his factories were taken over by the state. He has added Mao's bust to the mantelpiece, and kept his comfortable house. He will receive five percent of the value of his factories as estimated by the government.

* **Doing Battle With Nature, Landscape Modification and Resource Utilization in the People's Republic of China, 1960-1972** by Cristopher Salter (Occassional Paper no. 1, Asian Studies Committee, University of Oregon, Eugene, Oregon. $4.00) is a little known but fabulously interesting

Doing Battle with Nature

bibliography. Salter has collected 95 pages of bibliography of all the English language articles in the Chinese and western press which relate to China and her relations to natural resources, land, environment and development. It is well indexed into tantalizing subjects like "multiple-use", "orchards", "parks", "petroleum", "sewage", "water conservancy", "waste utilization", "chemicals", "industrialization", etc. The only problem is that most of these articles appear in scholarly journals and collections of translations put out by the US Government which are only available in large libraries. (See "Where to Find Good Translations of Chinese Articles, etc.") Still, there are many references to **Peking Review**, **China Reconstructs**, etc. which are readily available.

The Process of production is one in which man knows, transforms, and utilizes nature. But natures' resources cannot be fully utilized by producing one product. In making one product, resources are partially transformed into this product and the rest becomes "waste". The question is how to look at this "waste"... from which point of view and with which attitude?

From the metaphysical point of view, "waste" can not be used and should be gotten rid of. On the contrary, the materialist dialectical point of view holds that what is "waste" and what is not "waste" is relative. There is nothing in the world which is absolute "waste". "Waste" under one condition may be valuable under different ones. "Waste materials" left from one product can become a good material for another product. After being transformed and utilized, "waste material" can become a product or a useful material.

—(Writing group of the Tientsin Municipal Revolutionary Committee, 1971)

* **China Tames Her Rivers**, (Foreign Languages Press, 1972, paper, 51 pp., $.35) is a short pamphlet which describes some of the massive campaigns in water conservation and flood control which the Chinese launched to control the rampaging Yellow and Huai Rivers. Both rivers have built up river beds above ground level with silt over the years. They are diked to contain seasonal floods and the dikes often break. The Yellow River, nicknamed, "China's Sorrow", traditionally wrought almost yearly destruction to millions. It now has been subdued.

A ten kilometer long sewage disposal canal has been built in Changchun (a large city in Manchuria). It carries off sewage water which used to flow into the Yitung River which cuts across the city. The sewage water drains off to irrigate farmland on the outskirts. This has helped improve the cities environmental sanitation and has increased vegetable and grain output... The people's communes, using sewage water which contains nitrogen and phosphorous to irrigate their farmlands, save a total of about 3,500 tons of chemical fertilizer a year.

—(Ta Kung Pao newspaper, 1971)

* **Man Against Flood**, by Rewi Alley (New World Press, 1956, paper, 109 pp., $1.25) is written by a New Zealander who has spent his life in China. He records the devastating 1954 Yang Tze River flood and the steps taken to remedy it.

Pollution of the environment is not only unhealthy to people, it is destructive to nature. It destroys crops, creates hazards

...animal and fish life and is unbalancing to nature. What to do about the garbage of industrial production is a big question all over the world, particularly in the capitalist countries where profits get priority. In China, this problem is now being tackled. Industry is at work to control pollution and recycle waste materials.

—(Writing group of the Tientsin Municipal Revolutionary Committee, 1971)

The Chinese offer us the only working alternative model to environmental destruction in the name of profits. It is an incomplete and somewhat flawed model, but well worth studying for some good hints on how things might be otherwise in our own backyard. Real ecology fanatics might want to chase down infrequent other articles which have appeared in such magazines as **The Far Eastern Economic Review, Clear Creek, Eastern Horizons,** and, yes, even the **Wall Street Journal.**

WOMEN IN CHINA

The position of women has changed dramatically in China over the last twenty five years. Arranged marriages, bound feet, taboos against divorce or remarriage and the virtual servant bondage of young wives to mothers-in-law are all in the past. Women now work in every conceivable occupation from repairing high tension wires and oil drilling, to politics and the arts.

Women have indeed been liberated. But in many ways their liberation has been unlike the process in the west. Frowning, as the Chinese do, on individualism, women's freedom has evolved around the struggle to become equal to men; to share occupational opportunities which will allow both women and men "to build socialism", together.

Day care centers, maternity leave, health care, a new marriage law, equal job and educational opportunities have created a situation where there are relatively few social or political differences between men and women.

* For a look at the Chinese woman of the past, try **A Daughter of Han,** by Ning Lao T'ai-t'ai, (as told to Ida Pruitt, Stanford Univ. Press, 1967, paper, 245 pp., $2.95). This is the autobiography of a working woman who lived from 1867-1938. It gives a good sense of the incredibly hard and demeaning position of women in old China.

The mother-in-law, showing the effects of a hard life, was little more than a living corpse, so Gold Flower did not suffer much from that quarter as did most Chinese brides. But her husband made up for this lack, treating her worse than a dozen mothers-in-law. She had to wait on him, day and night. When he went to sleep she had to take off his shoes and clothing; in the morning she had to put them on again. She had to light his cigarettes, pour his water, hand him the cup with both hands and with a subservient smile on her face. He struck her daily as a matter of course and beat her unmercifully if she did not obey his commands on the instant.

—(Jack Belden, 1949)

* One of the first acts of the Communist Government upon assuming power, was to promulgate a marriage law which completely redefined the rights of women and children in new China. For people interested in the women's movement, this is an interesting document. **The Marriage Law of the Peoples Republic of China,** (Foreign Languages Press, 3rd edition, 1973, paper, $.25) Also, you might look at another pamphlet from China, **New Women in China,** (Foreign Languages Press, 1973, paper, 80 pp., $.50)

* **Women and Child Care in China,** by Ruth Sidel, (Penguin, paper, 1973, $1.95) is the best comprehensive report on what it is like to be a woman in China and how children are raised. It deals with marriage, pregnancy, child birth, day care center, kindergarten, curricula etc. Interesting for anyone trying to set up such institutions in this country. Both Ms. Sidel and her husband (a doctor) have been to China.

With the increasing bankruptcy of the rural economy in recent years, the basis for men's domination over women has already been undermined. With the rise of the peasant movement, the women in many places have now begun to organize rural women's associations; the opportunity has come for them to lift up their heads, and the authority of the husband is getting shakier every day...

—(Mao Tse-tung, 1927)

* **Women in China, Studies in Social Change and Feminism,** by Marilyn Young (Center for Chinese Studies, University of Michigan, Ann Arbor, Michigan, 1973, paper, 259 pp., $3.50) is a fine pot pouri of articles by Chinese and American women. The emphasis is on comparing the movements and the problems (often quite different in each country) that Chinese and American women have confronted.

HEALTH CARE IN CHINA

The health care system in China is perhaps the best system in any country in the world. It cares for 800 million people. Comparisons with the past are stark; there used to be no health care for 90% of the Chinese people, now everyone is attended to, and it is virtually free.

The Chinese seem to have long since learned the lesson that many neighborhood health clinics are learning in this country: namely, most illnesses do not need to be treated or diagnosed by a highly skilled specialist who has spent years in school. Cases that are severe are simply referred upwards from "Barefoot Doctor" in the countryside to commune clinic, to provincial hospital and on to a brain surgeon in Peking if the illness requires it. Tens of thousands of people are trained each year as medics, clinicians and in preventive medicine. It is the generalist rather than the specialist which is the backbone of Chinese health care.

* **Away With All Pests,** by the English surgeon Joshua Horn (Monthly Review, 1971, paper, 192 pp., $2.45) is a wonderful book. Horn taught and practiced in China for many years in large city hospitals as well as rural areas. He talks about medical training, the retraining of urban raised doctors to go to the country and aid in massive campaigns to wipe out VD, flies (both now non existent in China), shistosomiasis bearing snails, mosquitoes, & contaminated drinking water: health through information and grass roots education where the "doctor" plays a relatively small role.

This is indeed a very hopeful book for doctor and layman alike... and anyone else who may doubt that there are better ways to deal with the sick than through Park Avenue doctors.

If you have an illness, put a red sticker in your bowl when finished, and special care will be taken in washing the bowl.

—(Sign in Peking restaurant, 1971)

***The Scalpel, The Sword,** by Ted Allan and Sydney Gordon (Monthly Review, 1973, paper, 319 pp., $3.95) is an interesting story about Norman Bethune, the Canadian doctor (and, now, Chinese folk hero) who worked with the People's Liberation Army in the 1930's. He died of septicemia after performing an operation on a Chinese in 1939. Gives a good sense of how the Chinese put together an amazing health care system with almost no doctors, drugs or equipment in their mountain hideaway during World War II.

In the pediatrics wards of hospitals, relatives are encouraged to visit with the children throughout the day. They are given time off from work with no loss of salary. At General Hospital No. 2 in Kwangchow (Canton), a sick child dances to the singing and clapping of the daily visitors.

Another fine collection of articles on medicine and mental health care techniques is put out by HEW. **Medicine and Public Health in The Peoples Republic of China,** Edited by Joseph R. Quinn, (U.S. Department of Health Education and Welfare, Public Health Service, National Institute of Mental Health, DHEW Publication No. (IH 72-67). 1972, 304 pp., $4.50) is the best available compilation of articles on all aspects of Chinese health care. There is a particularly interesting article "Mental Diseases and Their Treatment," plus others on "Nutrition," "Acupuncture," "Traditional (herbal) Medicine as a Basis for Chinese Medical Practices" (herbal medicine is still widely encouraged and used in China), and "Cancer Research."

Medical education must be transformed. It is basically useless to study so much... The important thing is that they (the doctors) study while practicing. This way doctors sent to the countryside will not over rate their own abilities, and they will be better than those doctors who have been cheating the people and better than the witch doctors. In addition, the villages can support them. The more a person studies, the more foolish he becomes... In medicine and health, put the stress on the rural areas.

—(Mao Tse-tung, 1969)

For all you acupuncture buffs, take a look at **Acupuncture,** by Felix Mann (Vintage, 1971, paper, 234 pp., $1.95). Quite technical. Goes into the Chinese classics on acupuncture plus Dr. Mann's own more scientific explanation of how it works.

* The Chinese have also put out a short pamphlet, **Acupuncture Anaesthesia,** (Foreign Languages Press, 1972, 37 pp., $.35) which has photos and text.

If you are curious about Maoist Psychiatrics, and read French, track down, **La Sante Mentale en Chine,** by Gregoriao Bermann (Henri Maspero, 1, Place Paul-painleve, Paris Ve, France, 1973, 258 pp., 38.00 francs). Maoist psychotherapy is indeed a fascinating subject. The Chinese detest Freud and bourgeois individualistic therapy on the couch. They tend more towards treating the mentally ill through group work and community context. In any event, there are very very few psycopathic people in China.

* T'ai-chi Chuan, or Chinese shadow boxing, is widely practiced in China as physical therapy. The ancient art has been catching on here at home of late in the tidal wave quest for health and tranquility in our increasing unhealthy and untranquil world. If T'ai-chi is your bag, try **T'ai Chi Chuan, Mind and Body in Harmony,** by Sophia Delza, (Simon and Schuster, 1972, paper, 189 pp., $1.95).

* And don't forget, **Chairman Mao's Four Minute Physical Fitness Plan,** by Maxwell L. Howell (Celestial Arts, 1973, 64 pp., $3.95). This one includes a 7" L.P. of original Chinese music and cadences plus an illustrated book. Maybe we can turn some captains of industry on to these communist exercises to control their capitalist waistlines.

* If you want the whole works on Chinese traditional medicine; herbal remedies, acupuncture, moxibustian (those clove like things that get stuck into you head and burn), try, **The Chinese Art of Healing,** by Stephen Palos (Bantam, 1972, paper, 210 pp., $1.50). Most of these techniques have been proven efficacious and are still used in China.

Serving the People: Observation on Medicine in the Peoples Republic of China, by Ruth and Victor Sidel (1973, 317 pp., $10.00) is a fine book. These two have been to China twice. He is a physician and she a social work supervisor. They learned a lot in China and have a lot to say in return about how health care personel and doctors are trained and practice, and how modern Chinese medicine has succeeded in combining many traditional herbal remedies with modern drug treatment and surgery. This book can be gotten through the Josiah Macy Foundation, 1 Rockefeller Plaza, N.Y., N.Y. 10022.

LITERATURE AND PHILOSOPHY

Mao has strong opinions on the functions of art and literature in society; they should serve the people. The Chinese have what is called "socialist realism" art. It is often quite didactic and invariably contains a political message.

Marc Riboud

A college dormitory scene.

But it can still be enjoyable. Actually performances are almost always executed with consumate skill.

* For a look at the past, try **Anthology of Chinese Literature**, by Cyril Birch, (Vol. I, **Early Times to the 14th Century**, 492 pp., Vol. II, **14th Century to the Present**, Grove Press, 1972, paper, both $3.95). A nice collection of stories, poems, plays and miscellany.

What ever you do, don't miss Lu Hsun, China's greatest writer. His writing is superb; amusing and sad. He was China's H.L. Mencken.

Lu Hsun was a short story writer and essayist who died in the 1930's. But his writing is still very popular in China. He was witty, sarcastic, sardonic, cynical. He was also hopeful that China could get it together. He hated the venality of Chiang and his clique of corpulent bankers, generals and urban rich aping the west in the most demeaning way. In the communists and youth he placed his hopes for the future.

* His stuff is very readable; short two page essays, reflections, fables, ten page stories and his tour de force, **The True Story of Ah Q.** The Chinese have put out some excellent translations in, **The Selected Stories of Lu Hsun** (Foreign Languages Press, Peking, paper, 255 pp., $1.75) Good reading. Lu Hsun jousted a few dragons in his day.

Once upon a time there was a country where those in power had ground down the people, yet still looked upon them as formidable opponents, whose writings were machine gun bullets and whose art work were tanks. Though they were the conquerors, they did not alight from trains at the regular stations. Feeling unsafe on the earth, they flew about in the air; and their resistance grew so low that in any emergency they came down with flu, infecting their ministers so that all fell ill.

They published massive dictionaries, more than one of them, but none for practical use. To understand the real situation one had to refer to a dictionary which was never printed. There one could find the most original definitions. 'Liberation' is equivalent to execution... The definition of 'official' is relatives, friends and slaves of a powerful man... 'Morality' is 'forbidding women to show their arms'. 'Revolution' is 'flooding the fields and bombing bandits.'

They published large tomes of laws compiled by scholars sent to different countries to study their legal systems and select the best, so that no country in the world possessed a code so comprehensive. But at the beginning was a blank page which only those who had read the dictionary which was never printed could read. Here were three clauses: First, some cases should be treated with leniency. Secondly, some cases should be treated severely. Thirdly, this does not apply in every case.

—(Lu Hsun, 1936)

For a good general tour through Chinese philosophy, try **A Short History of Chinese Philosophy**, by Fung Yu-lan (Ed. by Derk Bodde, Macmillan, 1966, paper, 368 pp., $2.95). It gets quite involved, in places. If you're looking for the cosmic banana peel, or "mysticism made easy", forget it.

If you're into Taoism, and want to read Lao Tze's (The Masters) incomparable **Tao Te Ching**, try the translation by Gai Fu-feng and Jane English (Vintage, 1972, paper, 170 pp., $2.95). Has Chinese calligraphy, translation and some fine photos.

Chuang Tzu, (trans. by Burton Watson, Columbia University Press. Paper, 1964, $3.50) is one of the very best translations of this Taoist text. Watson catches all of the playfullness and humor in Chuang Tze. It's a joy to read.

The **I Ching**, or the Confucian classic, **The Book of Changes**, is a rather strange and incredible book. Its powers of divination have fascinated and hooked many since its inception 3000 years ago. If used right and respectfully, it does indeed seem to have power. The best edition I've found is, **I Ching, The Book of Change**, translated and edited by John Blofeld, (Dutton, 1968, paper, 228 pp., $1.45). Blofeld has a very lucid explanatory section which discusses history of the **I Ching** and how to use and interpret the texts and commentaries. Good luck on this one. It's a heavy book.

* For some insight into where literature and theatre are today in China, try **China on Stage**, by Lois Wheeler Snow (Vintage, 1973, paper, 328 pp., $2.45). Lois was the late Edgar Snow's wife. She discusses the role and function of art, music and theatre in Modern China, and includes the texts of several popular revolutionary operas, plays and ballets.

Rehearse for the revolution.

—(Sign on wall of practicing room of Red Guard Art troop, 1971)

* In 1942, Mao wrote **Talks at the Yenan Forum on Literature and Art** (Foreign Languages Press, paper, 80 pp., $.40). In it, he summed up his feelings on the relationship between literature and politics, and why literature should be used to further the revolution and cause of the people. Since that time there has been very little frivolous literature, no murder mysteries, no pornography, no decadent love stories, in short, no escapism written in China.

Finally, treat yourself to Mao's poetry. He is a fine poet. Very subtle and much less bombastic than many of his less well positioned contemporaries. **Poems of Mao Tse-Tung**, (trans by Hua-ning Lieh Engle and Paul Engle, Delta, 1972, 160pp. $2.45) contain the best available translations of Mao's poetry. There are 37 poems in this volume plus an extensive introduction. Mao's poems are a real treat. While they are often political, they are invariably subtle and graceful as well. Mao writes in the classical style. And in spite of his admonitions to youth to steer clear of "the old," he skillfully uses many classical and historical allusions which give his poems a strange mix of New China portrayed through symbols and references to Old China.

Ten More Poems of Mao Tse-tung, (from, **Chinese Literature**, May 1966, Eastern Horizon Press, 1967, 33pp., $1.25) contains the ten most recently translated poems of Mao. They are in the official Chinese translation, which are by far the best. Bilingual texts accompany each poem.

To Mr. Liu Ya-tse

I can not forget how we drank tea-together in Canton
And exchanging verses at Chungking just as the leaves yellowed.
Thirty-one years are passed, and I am back once again in the old capital;
At the season of falling flowers I read your beautiful lines.
Take care not to break your heart with too much sorrow;
We must ever take a far sighted view of the ways of the world.
Do not say that the waters of Kunming Lake are too shallow;
For fishing they are better than the Fuchun River.

—(Mao Tse-tung, 1950)

MAGAZINES AND PERIODICALS FROM CHINA

A number of informative weekly and monthly periodicals are available in English (as well as French, Spanish, German, Italian, and ten other languages). Subscriptions are quite inexpensive and most are sent air mail. (There is a 40% discount offered for bulk orders from bookstores and dealers.) The articles contain a lot of important information on the arts, how China is handling her domestic problems and foreign affairs. Some find the language a barrier at first. The English is flawless. But the communist rhetoric is a turnoff to some. Once you get used to it, however, there should be no problem.

Peking Review: (Weekly, $4.50 per year). This is China's official political weekly. It contains all important speeches, articles, editorials and statements as well as sections on concrete domestic problems. Much of each issue is concerned with international problems and affairs of state. But the most important utterances of every kind invariably make it into **Peking Review.** It is short. An excellent weather vane telling the careful reader what is going on.

China Reconstructs: (Monthly, $3.00 per year). A glossy paper magazine with color photos and articles; China's **Life Magazine** with a slightly different editorial position. Has a lot of very interesting articles on agriculture, science, the environment, waste reclamation, reforestation, medicine, education, art, women, geography, human interest plus a quite good monthly Chinese lesson. The articles are short and concise. But do give good glimpses into the basics of each subject.

Chinese Literature: (Monthly, $4.00 surface mail, $14.00 Airmail). A tastefully done small periodical full of poems, stories, plays, critical pieces and reproductions of art work. Most of the pieces are contemporary and in the socialist realism school of literature. But there are occassional stories by Lu Hsun, poems by Mao and other gems from the past. There are also various contributions of China's minority peoples: Tibetans, Uigurs, Mongolians, Moslems, etc.

China Pictorial: (Monthly, $4.00 surface mail. $16.00 air mail). Some excellent photographs here. Although many fall into the smiling-peasant-holding-sheath-of-rice-stalks vein of communist photo journalism. Includes short articles on sports, life of various kinds of workers, contact with various visiting groups in China and abroad, industrial achievements, and human interest.

Scientia Sinica: (6 times per year, $19.00 surface mail, $28.50 airmail). This is a technical journal in English, covering a wide variety of China's scientific achievements. Good for the specialist.

Exchange information. This is of great importance in achieving a common language. Some fail to do so and like the people described by Lao-tzu, who do not visit each other all their lives, though the crowing of their cocks and the barking of their dogs are within hearing of each other.

—(Mao Tse-tung, 1945)

A DAUGHTER OF HAN, The Autobiography of a Chinese Working Woman, Ning Lao T'ai-t'ai, 1867-1938, as told to Ida Pruitt. Stanford 1967 254p. 2.95

IDEOLOGY AND ORGANIZATION IN COMMUNIST CHINA, Franz Schurmann. Organization of Party and Government, cities and villages, industry. Early emulation of the USSR, new methods to achieve economic progress. UC Press 1966 540p. 5.50

INDUSTRIAL SOCIETY IN COMMUNIST CHINA, Barry M. Richman. A firsthand study of economic development and management in China and socialist solutions to problems -- comparisons with India, the USSR, Japan and the U.S. Vintage 1972 968p. 4.95

INDIA'S CHINA WAR, Neville Maxwell. On India's border war with China in 1962, the author's documented view is that India provoked the Chinese and started the shooting. Anchor 1972 537p. 2.95

JOURNEY BETWEEN TWO CHINAS by Seymour Topping, Assistant Managing Editor of the N.Y. Times. A firsthand, critical study of modern China by one of the few U.S. journalists to visit Yenan in the 1940's and one of the first to be admitted to the People's Republic in the 1970's. He deals with U.S.-China relations including the President's visit, the Vietnam War and the Pentagon Papers, Sino-Vietnamese relations. Harper 1973 459 p. 3.95

THE MANDATE OF HEAVEN, Record of a Civil War, China 1945-49, by John F. Melby. Anchor 1972 378p. 1.95

MAO AND THE CHINESE REVOLUTION, Jerome Chen, Comprehensive political biography. Mao's 37 poems in English are included in Part II. Oxford 1965 319 p. 2.95

Workers at Taching Oilfield

MAO PAPERS, Anthology & Bibliography by Jerome Chen. Unpublished or little-known writings of Mao Tsetung. Mao's instructions issued before & throughout the Cultural Revolution. Mao's literary style, etc. Oxford 1970 * 221 p. 10.00

THE MAY FOURTH MOVEMENT, Intellectual Revolution in Modern China, by Chow Tse-tung. Stanford 1967 486 p. 3.75

MODERN CHINA: The Story of a Revolution, by Orville Schell and Joseph Esherick. An exciting study of the Chinese people from the Opium Wars thru the Cultural Revolution. Emphasizes the role of workers and peasants in the struggle for a new China. Photos. Vintage 1972 149 p. 1.50

THE OPIUM WAR THROUGH CHINESE EYES, Arthur Waley. (1958). Stanford 1968 256 p. 2.95

PEASANT REVOLTS IN CHINA 1840-1949, Jean Chesneaux. Deals with the qualitative differences between earlier peasant revolts and the organized revolution of the 1930's and 40's in which the communists took the lead to unite the struggles of peasants and workers. Norton 1973 * 180 p. 7.95

PRISONERS OF LIBERATION (1957), by Adele and Allyn Rickett, with an introd. by Victor H. Li of the Stanford Law School. Charged with espionage for the U.S. Naval Intelligence Service in 1951, the authors spent four years in a Chinese jail. In this account of the prison reform system, they give one of the most complete studies of criminology in China where transformation of the prisoner into a new human being, not punishment, is the objective. A vital document for all interested in prison reform. Anchor Reprint 1973 344 p. 2.50

Page from catalog No. 28, China Books & Periodicals.

There are also a large number of Chinese language publications available for those who read or want to practice their Chinese. These include the **New York Times** of China, **The People's Daily** (the official national daily paper), and **Red Flag**, China's monthly theoretical magazine.

Other available publications and prices are listed below. All can be gotten most conveniently from one or another of the China Books and Periodicals branches. If you want to look at a sample, send 25 cents for handling and specify the

agazine which interests you. China Books promises to orward you a copy. They will also promptly handle ubscription requests. Write to:

China Books and Periodicals
West Coast Center
2929 Twenty-Fourth St.
San Francisco, Ca.
94110

China Books and Periodicals
East Coast Center
125 Fifth Ave.
New York, N.Y.
10003

China Books and Periodicals
Midwest Center
900 West Armitage Ave.
Chicago, Ill.
60614

OTHER INTERESTING PUBLICATIONS FROM OUTSIDE CHINA

China Now, (address subscriptions to, SACU, 24 Warren St., London, W1P 5DG, England. 2nd class airmail $7.00, unsealed surface mail $4.50 per year) is published in England by the Society for Anglo-Chinese Understanding. It is a sensible slender publication put out bi-monthly. It has short articles on concrete subjects like health, medicine, energy, environment, education, building, work, drama etc. All are written in a down-to-earth style. No scholarly hot air. Good book review section. **China Now** is fine fodder for the amateur sinophile.

The **Bulletin of Concerned Asian Scholars,** (address subscriptions to, CCAS, 604 Mission St., Room 1001, San Francisco, Ca. 94105. $6.00 per year for regular subscription, $4.00 for students) is a scholarly but enlightened journal which has articles on all of Asia. They have some interesting pieces from time to time on China written by the Young Turk Element of the scholarly community called "China Experts".

China Report, (address subscriptions to 41 Union Square West, New York, N.Y. 10003. $2.00 annually) is a monthly newsletter put out by the New York U.S.–China People's Friendship Association. Articles view China in a very favorable light. Most written by people who have been there. Articles are short and are usually on practical or political subjects.

Eastern Horizons, (address subscriptions to 18 Causeway Rd., Hong Kong. $5.00 annually) is a fine readable monthly magazine. Includes articles on such subjects as how the Chinese are paid, how cadres are trained, what the Cultural Revolution meant to the average guy, how health care is set up, how work teams are organized on communes etc.

MISCELLANEOUS BOOKS

Books for Children

* **Chinese Children,** with captions and introductions by Rewi Alley (Caxton, 1972, 104 pp., $3.95) is a beautiful book of photos of Chinese children.

* **Chinese Fairy Tales,** by Isabelle Chang with drawings by Shirley Erickson (Schocken, 1968, 74 pp., hardbound, $2.45) is a pleasant book of old Chinese tales.

* **Favorite Children's Stories From China and Tibet,** by L.C. Hume (Tuttle, 1962, hardback, 119 pp., $3.95). Illustrated.

The world is yours as well as ours, but in the last analysis it is yours. You young people, full of vigor and vitality, are in the bloom of life; like the sun at eight or nine in the morning. Our hope is placed in you. The world belongs to you. China's future belongs to you.

—(Mao Tse-tung, 1957)

* **Chinese Kites,** by David Jue (Tuttle, 1972, hardback, $3.25) is an illustrated guide on how to make and fly your own kite; an ancient Chinese tradition.

* A **Book About Pandas,** by Ruth Gross (Dial, 1972, hardback, $3.95) is panda-monium for small children. Has photos.

Our World: The People's Republic of China, by Margaret Rau, (Julian Messner, 128 pp., hardback, $6.00) is about fifth grade level and gives some truly fine insights into life in China today. It's illustrated and has photographs.

Margaret Rau has done two previous books for children on China, **The Yellow River,** and, **The Yangtze River** (also Julian Messner, $3.95) which are reported to really get children off.

The Foolish Old Man Who Moved The Mountain, edited by Marie Louise Gebbhard, (Friendship Press, 1969, 128 pp., paper, $1.75) is named after the famous (and presently very popular) tale of an old man who decides to move a mountain (this is pre-ecology consciousness). Everyone laughs and tells him it is impossible because he is too old to complete it. He smugly replies that what he leaves unfinished, other generations can complete. The message is that no task is too large for the Chinese people to attempt.

Restored to health, Chang Chiu-chu helps in harvesting the wheat.

The book also includes stories, songs and various of Mao's quotes put together in such a way that children can understand them.

OTHER

Atlas

China, An Illustrated Atlas, (Rand McNally, 1972, 80 pp., hardback, $4.95) is a fine atlas. If you're going to read about China, it really helps to have an atlas handy. This one should do it.

Cookbook

How to Cook and Eat in Chinese, by Buwei Yang Chao (Vintage, 1970, 249 pp., paper, $1.95) gives a good cross section of different regional Chinese foods. Chinese food is such a pleasure when done right. There is tremendous variety. In the South they eat rice. In the North they eat grain. In Hunan and Szechwan the food is so hot it will put blisters on your tongue. On the coast they eat sea slugs and other ocean delicacies. Don't think it all stops with egg rolls and pork fried rice (which is typically Cantonese, or southern style).

CHINESE AMERICANS

* **Long Time Californ'; A Documentary Study of an American China Town,** by Victor and Brett Nee (Pantheon, 1973, 411 pp., $10.00 [should be out in paper soon]) tells the story of the Chinese Americans in San Francisco's China Town. Over the past century and a quarter millions of Chinese immigrants came to this country. They were treated like animals. Unbelievably savage racism of whites towards these "celestials" made it imperative that Chinese keep a distance from the mainline of American culture. The process of assimilation was rendered even slower by the strong Chinese sense of culture and family, so that even today many Chinese remain apart.

This is a terrific book with some wonderful interviews with old as well as young.

BIBLIOGRAPHY

China, A Resource and Curriculum Guide, by Arlene Posner and Arne Keijzer (University of Chicago Press, 1972, 278 pp., paper, $2.95) may be just what you're after if this section doesn't tell you enough. Good for China fanatics and teachers. Contains sections on available films, tapes, filmstrips, groups, conferences, libraries, Asian Studies Centers. The focus is academic and a trifle dry. But there are some good sections in the beginning on teaching about China, plus a good film list.

WHERE TO FIND GOOD TRANSLATIONS OF CHINESE ARTICLES, ETC.

Let's say you want to find out about reforestation, sports, steel presses, Peking Opera, the Sino-Soviet Dispute, the manufacture and use of pesticides or dam building. If the sources in the section on magazines (pp 39-43) don't suffice, you'll probably want to head to some large library or university Asian studies center (most big universities have one). There you will find a vertiable mountain of press, radio and periodical translations. You will be amazed by what you find if you don't get lost. The translation services were initially set up by the U.S. Government to keep tabs of the wily Chinese enemy. But they can serve better purposes as well. They are expensive to subscribe to. But here are the major services available:

Hsinhua Selected News Items
Hsinhua New Agency
Hong Kong.
Weekly and Daily coverage
Cost: $57.00 annually

Hsinhua (New China News Agency) is the AP or UPI of China, only with a different political slant. It's run (like everything else) by the Chinese Government. There are few murders, bank robberies, rapes and no Hollywood gossip. The emphasis is on foreign affairs and local stories on every subject imaginable from an examplary garbage collector or soldier to some new steel smelting breakthrough.

Translation From The Mainland China Press
National Technical Information Service
U.S. Department of Commerce
Springfield, Va., 22151
Cost: $130 annually

A subscription to these translations includes weekly newspaper surveys, monthly magazine selections and occassional background briefs. It's well indexed. Covers industry, agriculture, mining, theory, foreign affairs, sports, arts, politics... the works. You name it. It's an awesome amount of materials. The translations are prepared by the U.S. Consulate in Hong Kong.

Foreign Broadcast Information Service Daily Report, Vol I, The People's Republic of China,
National Technical Information Service
U.S. Department of Commerce
Springfield, Va. 22151
Daily with supplements
Cost: $60.00

Includes all important material from Chinese radio; a conglomeration of articles from **Red Flag, The People's Daily,** and New China News Service.

RADIO

And finally, folks, don't miss radio Peking's daily English language transmissions. A new adventure in short wave non commercial radio. (Below)

Radio Peking

English Language Transmissions

* effective only from Nov. to April
† effective only from May to Oct.

	GMT	Local Standard Time	Metre Bands	Kc/s
North America (East Coast)	00:00-01:00	19:00-20:00 (E.S.T.)	25*, 19, 16†	11685*, 15060, 17673†
	01:00-02:00	20:00-21:00 (E.S.T.)	42, 30, 25*, 24*, 19	7120, 9780, 11965*, 12055*, 15060
	02:00-03:00	21:00-22:00 (E.S.T.)	25*, 24*, 19, 16†	11965*, 12055*, 15060, 15350, 17855†
	03:00-04:00	22:00-23:00 (E.S.T.)	42, 30	7120, 9780
	12:00-13:00	07:00-08:00 (E.S.T.)	31*, 25	9480*, 11685
North America (West Coast)	03:00-04:00	19:00-20:00 (P.S.T.)	31*, 25*, 24*, 19, 16†	9460*, 11650*, 12055*, 15060, 15385, 17735†, 17855†
	04:00-05:00	20:00-21:00 (P.S.T.)	31*, 25*, 24*, 19, 16†	9460*, 11650*, 12055*, 15060, 15385, 17735† 17855†

These workers are winnowing grain on the outskirts of Peking. China is trying to integrate the peasants and workers by bringing agriculture closer to the cities and locating small industries in the countryside.

GROUPS AND ORGANIZATIONS

As plentiful as books and magazines on China are when you know where to look for them, there is still an awful lot of information that they do not cover. "Scholars" and other sundry intellectuals have by and large cornered the market on the China books trade. As a result, many of the interesting practical aspects of Chinese life have been ignored. How do the Chinese build their houses? How do they move 800 million people around without private cars? How conscious are they of the environmental hazards of development? What are they doing about them? What breakthroughs have they made in animal husbandry, reforestation, sewage treatment, industrial waste reclamation, etc? Do the Chinese "process" their food? These are the kinds of questions best answered by people who have been to China. Some Americans have taken relatively long trips and worked on communes and in factories. They have a lot to say. Many are glad to speak for a small contribution... or even for nothing if the cause is right.

The best way to get in touch with such people is through one of the many groups which have sprung up around the country. Many of the people in these groups are politically dedicated, and, in one way or another, have been really impressed by what they saw in China.

Once you get in touch with a group you can either just ask for a general speaker, or specify some topic and see if the group can come up with someone who has some knowledge on the subject.

One of the best ways of getting information, speakers, films and materials is through your nearest branch of the U.S.–China Friendship Association. Many of the people who have been to China have slides and can give a really interesting session for a class, group, town or school, if you can come up with travel money and maybe a little more.

The Friendship Association has loosely affiliated branches (all staffed by volunteers) in New York, Chicago, L.A. and San Francisco. They also often sponsor language classes.

U.S.–China Friendship Association
Suite 1085
407 South Dearborn
Chicago, Ill.
60605

U.S.–China Friendship Association
619 South Bonnie Brae
Los Angeles, Ca.
90057

U.S.–China Friendship Association
41 Union Sq. West
New York, NY
10003

U.S.–China Friendship Association
50 Oak St., Room 502
San Francisco, Ca.
94102

Another group worth trying is the Committee of Concerned Asian Scholars (they put out the **Bulletin of Concerned Asian Scholars**) which is a large organization of students and professors of Asian studies. CCAS has chapters at all major universities. They often have good people and programs available.

If you want to contact someone, try the following addresses:

East: Chris Gilmartin, 4514 Osage Ave., Philadelphia, Pa. 19143
Midwest: Elaine Emling, RR. 1 Whalen Rd., Verona, Wisc., 53393
West: Gail Omvedt, Department of Sociology, UC La Jolla, La Jolla, California, 92037

If perchance you are a high school teacher on the West Coast and need some help, films, book suggestions, speakers or just plain comfort, by all means get in touch with a really fine group called The Bay Area China Education Project. They work pretty exclusively with pre-college educational institutions. It's a labor of love, and they're good people. They put out teacher's guides, hold work shops and help in developing good class room curricula. They have two offices:

BAYCEP
P.O. Box 2373
Stanford University
Stanford CA 94305
(415) 321-2300, ex 4781

or

BAYCEP
Center for Chinese Studies
12 Barrows Hall
University of California
Berkeley CA 94720
(415) 642-0402

Finally, there is the National Committee on U.S. China Relations. They have Field Staff offices across the country. They tend to be more of the older generation-academic-big name variety, but can provide some help on films, slides, tapes and other resources. There main office address is:

National Committee on U.S.–China Relations
777 United Nations Plaza, 9B
New York, NY
10017

Guard against arrogance. For anyone in a leading position this is a matter of principle and an important condition for maintaining unity. Even those who have made no serious mistakes and have achieved very great success in their work should not be arrogant.

—(Mao Tse-tung, 1927)

FILMS AND FILMSTRIPS

Over the years there have been some good films made about China and in China. But beware! They are pearls among swine. Most of the films which pretend to have anything to do with China are a lot of crap; cripples of two decades of anti-communist paranoia.

It has not been until the last few years that the political climate has cooled off, and a few good American films have begun to come out. With Nixon playing diplomat in Peking some of the large networks forgot their fear and have put ou some good films.

Misunderstanding China (CBS, 1972), **China Today** (Canadian Broadcasting System, 1971), **China and The World** (BBC, 1970), **Red China**, (BBC, 1971) and the more recent Felix Greene films are all quite good. One way to find out what is available and well produced, is to check with your local U.S.–China Friendship Association (See addresses under "Groups and Organizations). You could als try one of the large distributors of educational films. One of the biggest is:

McGraw Hill Films
330 West 42nd St.
New York NY
10036

There is one fine series of film strips with a taped spiel whic come highly recommended. It is, **China**, (produced by the Nystrom Corp., 3333 Elston Ave., Chicago, Ill. 60618, $125.00 for the series). The package includes five color film strips, five accompanying cassettes, a teacher's guide, activity worksheet, 10 booklets of readings, and a map. This series has an intelligent narrative. Unlike many others, it tell a minimum of lies.

THINGS FROM CHINA

An increasing number of imports are coming into this countr from China. (We are selling them jet aircraft.) A lot of wicke ware, kitchen utensils, clothes, food and art work can be found at your local mass import outlet (Cost Plus, India Imports, Akron, etc.). In many cities such as San Francisco, there are whole stores which sell nothing but Chinese goods (ie., The Cultural Revolution, 2102 Union St., San Francisco CA).

Another great delicacy is Chinese beer which is now availabl in this country. Tsingtao Beer is one of the few irrefutable benefits of imperialism. Tsingtao is made in the port city of Tsingtao on the Shantung peninsula which was once a Germa colony. The Germans lost the real estate when they lost World War I, but the Chinese kept the brewery and formula. The beer is excellent, if expensive. Watch for it!

If you're interested in some sort of small gift from China which can be gotten through the mail, write for the **China Books and Periodicals Catalogue**. They have a good listing of records, art prints, woodblock reproductions, folk art paper cut-outs, postage stamps, buttons, posters, postcards and some crafts. (See addresses under "Magazines and Periodicals From China"). All three outlets accept mail orders for these as well as books.

WANNA GO TO CHINA... ?

How does one get to go to China? This is the big one. There are no simple answers, except to say that the Chinese are deluged yearly with tens of thousands of requests. They simply can not handle them all. When the Chinese "invite" a guest, they usually pay for the whole trip once a person gets to Hong Kong. This involves elaborate preparation and great expense for them. They are basically not set up for a lot of

tourism (nor do they want it). They have a finite number of hotel rooms, interpreters and guides.

None the less, a steady stream of visitors from the U.S. go to China every year. (Europeans never really stopped going). Unless one is a high ranking dignitary type, virtually the only way to go to China is on a trip with a group of other people. People who apply as a group have a much better chance of getting in. Of course, it all depends on what the purpose of your group is. In the past, the Chinese have hosted many third world groups, political groups, scholarly groups, women's groups and groups of specialists. It helps to have some constructive purpose other than rubber-necking.

One can tentatively form a group, and then write to the Liaison Mission of the People's Republic of China, Washington, D.C., or to the Embassy of the People's Republic of China, 415 St. Andrews, Ottawa, Canada. But the chances are very slim of getting a reply using this route.

The best bet is to try and hook up with some established group like the U.S.–China Friendship Association or other political group (See, "Groups and Organizations") which organize frequent trips to China. If you have a chance, talk to someone who has been to China and see if you can get any contacts or suggestions. This is a tricky subject. There is no clear procedure. But it can be done.

TRAVEL GUIDE

If you get a trip worked out, or are just interested in dreaming, you should take a look at, **Fodor's Peking**, (McKay, 1972, hardbound, $6.95). Gives helpful notes on meals, stores, hotels, travel, sites of interest, etc. Or if you really want the complete works, get **China: Nagel's Encyclopedia Guide**, (Nagel, revised edition, 1973, 1504 pp., hardbound, $29.00). Nagel's tells all.

CHINESE LANGUAGE

Learning Chinese is no cinch. But the best package deal for people who would really like to get into it contains both spoken tape and written text, and is available from China Books.

NEW IN 1974---NOW YOU CAN LEARN CHINESE AS IT IS SPOKEN IN PEKING with tapes prepared by THE PEOPLE'S CENTRAL BROADCASTING STATION in Peking. Pronunciation, vocabulary, pattern sentences and conversation in Parts I & II of ELEMENTARY CHINESE were recorded in China by announcers Ya Kun, Ting Jan and Fu Hua. Published by CHINA BOOKS & PERIODICALS 1974.

CL3	基礎漢語附錄音帶 CASSETTES FOR ELEMENTARY CHINESE -- playing time approximately 7 hours	
	Part I 4 cassettes covering lessons 1-36	12.50
	With text, in book format with title on spine	13.95
	Part II 4 cassettes covering lessons 37-66	12.50
	With text, in book format with title on spine	13.95
CL1	基礎漢語上册 ELEMENTARY CHINESE Part I	1.25
CL2	基礎漢語下册 ELEMENTARY CHINESE Part II	1.75
CL4	漢語讀本上册 CHINESE READER Part I	1.25
CL5	漢語讀本下册 CHINESE READER Part II	1.75

Prepared in China for the use of English speaking students, the above series of four volumes provides the most direct and up-to-date system for learning Chinese. The first two volumes stress pronunciation and conversation, while the two readers provide a thorough introduction to current popular reading materials. Commercial Press, Peking 1971.

There are an increasing number of dictionaries for as many different uses. If you're in this deep, you'd best consult the **China Books and Periodicals Catalogue**. It's a real jungle of possibilities depending on whether you are interested in reading or speaking. There are numerous different styles of writing Chinese, which range from the highly esoteric classical Chinese of the ancient classics, to T'ang poets, to turn-of-the-century literary style, to the simplified characters of the communists.

POSTSCRIPT

China and the Chinese are a marvel. There is no doubt that the next century will be theirs. They started with nothing but people, and are still building in a direction which makes sense to them. In the process they have learned much, made many mistakes and moved on. One wonders if Mao's prophecy for his country in 1927 might come to pass in some strange unthinkable apocolypse of the future in our own country. In 1927, Mao's visions of the future must have seemed as unlikely to many in China as revolution seems to many in America in 1974.

The present upsurge of the peasant is a colossal event. In a very short time... several hundred million peasants will rise like a mighty storm, like a hurricane, a force so swift and so violent that no power however great will be able to hold it back. They will smash all the trammels that bind them and rush forward along the road to liberation. They will sweep all the imperialists, warlords, corrupt officials, local tyrants and evil gentry into their graves. Every revolutionary party and every revolutionary comrade will be put to the test, to be accepted or rejected as they decide. There are three alternatives: To march at the head and lead them? To trail behind them waffling and criticizing? Or to stand in their way and oppose them? Every Chinese is free to choose, but events will force you to make that choice quickly.

—(Mao Tse-tung, 1927)

Nagel's Guide to China

Essential for anyone going to the People's Republic of China and extremely valuable to those who want accurate and entertaining summaries of Chinese geography, demography, history, religion, literature, games, art along with detailed physical descriptions of every major city and province. The whole thing was written by a group of young French scholars passionately devoted to Chinese civilization, and they show the French genius for lucid compression.

Price is a drawback: 30 to 35 dollars, depending upon where you buy it. But, for the price, you get 1500 pages, 92 plans, 15 large colored maps and 25 pages of Atlas in color. You also get a deep sense of China.

—Ed. LeFevour

Cream Rises
CHINA

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China at Work *Softest technology* 545
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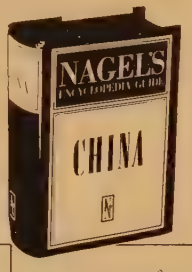
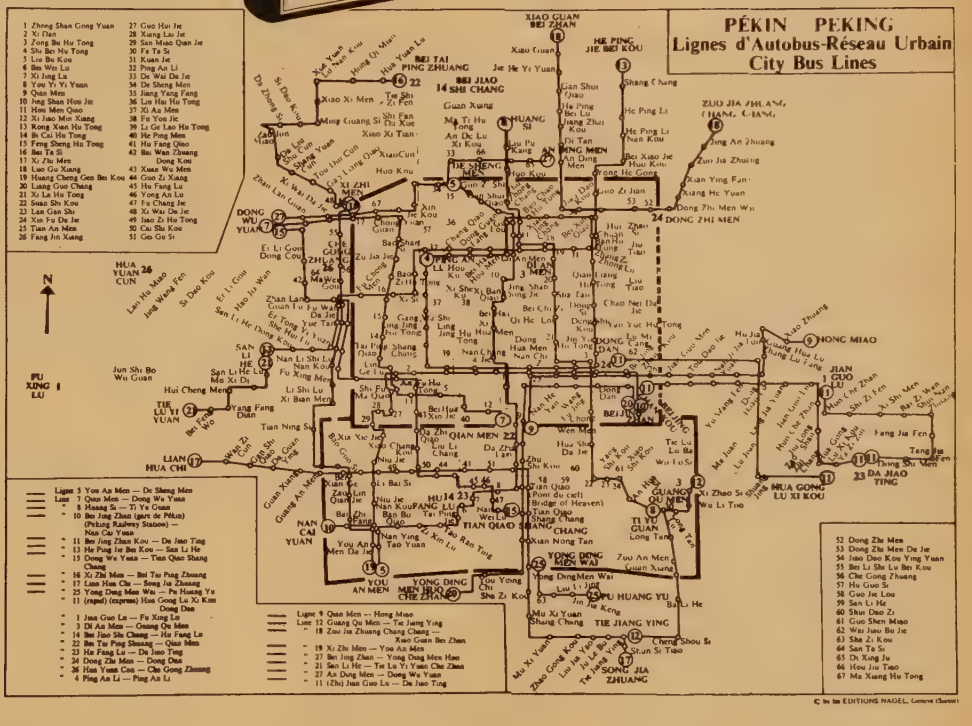
How to Cook and Eat in Chinese *Best cookbook* 591
Tao Teh King *Wisdom* 12
Chuang Tzu - Basic Writings *Taoist humor* 428
The Secret of the Golden Flower *Esoteric Taoism* 428

Nagel's Guide to China
1973; 1504pp
$29.00 postpaid
from:
China Books & Periodicals
2929 Twenty-Fourth St
San Francisco, Calif. 94110
or Whole Earth





Recycling in China

After making a recent trip to China, Pete Seeger commented on the Chinese system of waste recycling. Apparently the Chinese can bring all of their used items to a Waste Products Purchasing Center. There is a list price for everything. Old pairs of sneakers or worn out bicycle inner tubes bring a certain amount of money for each pound of rubber; old toothbrushes bring approximately a penny apiece because new bristles are put in them; & empty toothpaste tubes are purchased for the lead in them. Almost everything is recycled. In addition to the waste purchasing plants people connected to the plants go through the streets of the different neighborhoods to purchase recyclable products. Recyclable products also include paper, metal, glass, and plastics.

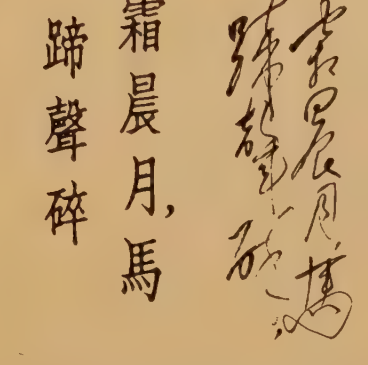


Fig. 5: A fragment of a poem by Mao Ze dong, written in xing shu, *in his own hand. Beside it are the same characters in printed style:* shuang chen yue, ma ti sheng sui, *"moon on a frosty morning, horses' hooves ringing pellmell".* (Lou shan guan, Lou shan Pass).

Nomadics

As soon as I saw **The Explorers Ltd. Source Book** *(Pg. 635) I called Al Perrin to ask if I could hire his art director. Turned out it was Al himself.*

So here's Al Perrin (AP) directing **Epilog** *layout and editing the Nomadics Section, with assistance by J. Baldwin (JB). If you can't beat 'em, join 'em.*

—SB

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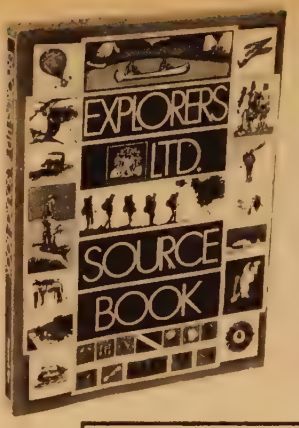
Explorers Ltd. Source Book

Anyone who uses this section of the **Epilog** *should have Al Perrin's* **Source Book**. *It musters a wealth of experience acquired in the field and through Al's (now defunct)* **Explorers Trademart Log** *(Pg. 300). As an access source it surpasses the* **Whole Earth Catalog** *in every particular—— better research, reviewing, and design—— quantity and quality.*

Each of the 26 sections begins with an incisive general introduction followed by detailed evaluation of publications, organizations, schools, and all manner of equipment and suppliers.

The rest of this Nomadics section of the **Epilog** *will focus mainly on subjects not covered in the* **Source Book** *or on items that have appeared since its publication.*

—SB



Explorers Ltd. Source Book
Alwyn T. Perrin, Ed.
1973; 384pp.
$4.95 postpaid
from:
Harper & Row, Inc.
Order Dept.
Scranton, PA 18512
or Whole Earth

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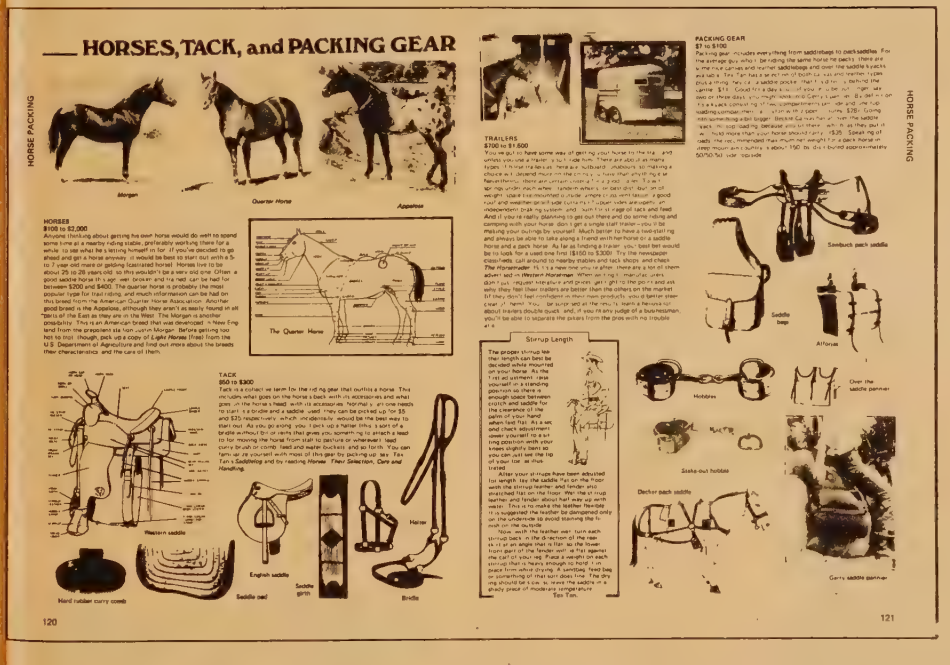
Engraving of Anacapa Island, California, by James M. Whistler, J. Young, and C.A. Knight. Whistler, perhaps best known for the portrait of his mother, was employed as an engraver with the U.S. Coast Survey for three months during the winter of 1854-55. In the above engraving, he was responsible for adding the two flocks of gulls in flight, which the Survey wasn't too happy about.

Coast and Geodetic Survey
Rockville, MD 20852

Over 23,000 individual surveys going back to 1835 are on file in the Coast and Geodetic Survey Archives, and copies of these as well as original maps and aerial photographs (from 1927 on) are available to the public.

The surveys represent a unique and comprehensive record of the United States coastline and adjacent waters, showing conditions existing at any particular date over more than a century and providing a quite detailed record of the changes that have occurred from both natural and man-made causes during this time. If you are interested in studies of the shoreline and adjacent land areas, topographic surveys should be requested; such surveys are identified by a number with the prefix T. Indexes of these surveys are available and will be furnished free upon request.



NORTH AMERICAN FALCONRY & HUNTING HAWKS
Frank L. Beebe & Harold M. Webster
Il. - $25

This is probably the best book available for the novice falconer. Training and trapping techniques for different types of birds are discussed along with care, feeding, and diseases. Well worth the price.
From: North American Falconry and Hunting Hawks, P.O. Box 1484, Denver, Colo. 80201

•

If you want to get right into ski touring at its best, pack a lunch and spend a day on a familiar trail, one you've traveled in July or August with gnats buzzing around your head and a couple of troops of boy scouts competing with you for foot space. Chances are you'll have it all to yourself now except for rabbits and deer.

WENAHA DOG PACKS

P.O. Box 2081, Lynnwood, Wash. 98036

Wenaha specializes in dog packs. Their standard ones are waterproof nylon pouches on a canvas saddle, but they will make canvas packs on request. Three styles are available: with flaps over the pockets, without flaps but with a matching top cover which allows bulkier loads, or with both flaps and top cover so you can use it either way. Each style is available in either small, medium, or large sizes. In addition you may opt for the deluxe model with leather bottoms and leather part way up the front of the pouches and if that isn't enough, there is the Exploration model with leather brush guard, two flaps and top cover and an adjustable butt strap (in addition to the standard breast and cinch straps). Each pack comes with wrap-around strap, instructions, and training tips. The 1973 prices are not firm yet but start around $20.

Source Book Input

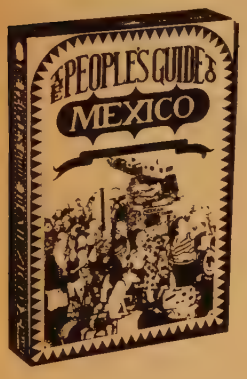
Plans are to bring the **Source Book** *out once a year, continually expanding and updating it. With your help, by way of comments, ideas, opinions, reviews, and reports, we can improve its quality further. Please write and keep us aware of what's happening in your areas of interest. We can pay from $5 on up for material accepted—— but do send a letter telling us of your background and what you'd like to report on, first.*

Al Perrin
Explorers, Ltd.
Lewes, DE 19958

The People's Guide to Mexico

The best 360° coverage of traveling and short-term living in Mexico that's going. Reading the book is almost like being there and going through the problems and frustrations, pleasures and wonders of dealing with a new environment, new people and new ways of doing things, but by golly every page, every step of the way you're learning something. Carl is candid, to the point, and leaves few, if any, questions unanswered in telling you how to handle just about everything: border crossing, driving in Mexico, public transportation, hitching, camping, indigenous living (living on the beach, building a hut, stove, digging a well, etc.) and scrounging for food, renting a house, restaurants, markets, stores, health, legal hassels, communication services, car repairs, the language and customs, cantinas and whorehouses, buying things, and so forth. A fantastic book, well written and really interesting. After reading the People's Guide, it would seem that the Fodar Guide to Mexico and others in their league are just so much pissin' in the wind.

—AP



The People's Guide to Mexico
Carl Franz
1972; 380pp.
$3.95 postpaid
from:
John Muir Publications
P.O. Box 613
Santa Fe, NM 87501
or Whole Earth

The Mexican sense of humor is strongly based on the double meaning. These double-meanings may be quite obvious or subtle to the point of complete mystification. Because of their frequent use, either as obvious jokes or traps for the unwary, you should learn to avoid certain words and expressions. Don't panic— in ordinary conversation there are only a few words that you'll want to use with care.

In the market you'll probably want to buy eggs. You spot a likely stall, tended by a respectable looking young man, and you ask, "*¿ Tiene huevos?*" ("Do you have eggs?"). Immediately everyone in the area begins to laugh and shout to each other, enjoying a joke that is obviously at your expense. You fight down anger (or panic) and look beseechingly at the fellow, hoping for a little compassion. He answers calmly, "Yes, I do. Two big ones." If this doesn't bring down the house, your flustered exit will.

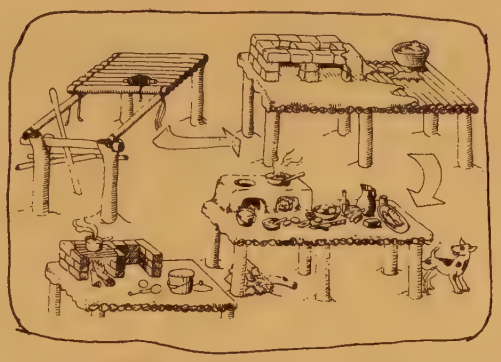
The use of the word *huevo* should by now be of obvious double meaning. You've just asked the guy if he "has balls" and he's proudly confirmed that he does. The safe words for egg are *blanquillo* (little white one) or *yema* (yolk).

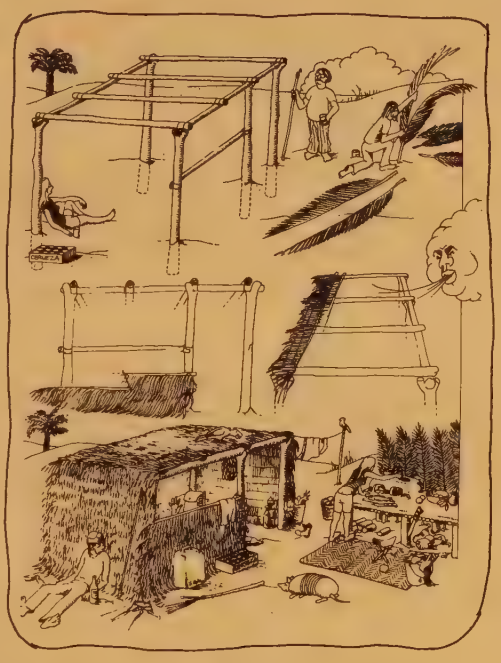
•

The handing over of the *mordida* is done discreetly and without embarrassment on the part of either person. None of this, "Pssst! Meet me in urinal four at eight o'clock!" Instead you reach casually into your wallet (or your pocket if you're really prepared), extract a dollar or two and hand them over. If it isn't enough, the official will shake his head. You pull out another dollar and another and when the right amount has been reached, business will proceed as usual. Border officials generally take only minor amounts and manage to restrain themselves from really bilking people.

Handle the situation with the proper attitude; just assume that every bribe is a legal and required fee. Don't act like a naughty child or a criminal or the person being bribed will react defensively and probably raise the price. When you both pretend (I really believe it in most cases) that a small consideration is legitimate, the transaction will be fast and friendly.

•





Traveler's Guide Book to Europe & Asia

A real sleeper, ranks here in popularity with the Vagabonding books. Probably better: less localized detail and more considered advice.

—Richard Gree

Traveler's Guide Book to Europe & Asia
Mark Atlas
1973; 249pp.
$2.95 postpaid
from:
Robert Speller & Sons, Pub., Inc.
10 E. 23rd St.
New York, NY 10010
or Whole Earth

In April of 1970 when I passed through Afghanistan, there was a notice on the bulletin board of the American Embass It said, "Warning: The penalty in Iran for trafficking in dru is death. 26 shot to date. 1 American on trial now. Don't next." By November of 1970, 56 had been shot.

•

RECOMMENDED PLACE TO RECEIVE MAIL

Allow at least ten days for sending mail to and from the Soviet Union. If you must receive mail there, use American Express International, Hotel Metropole, Suite 384, Sverdlo Place, No. 2/4 Moscow. Tel: 256-384.

FURTHER INFORMATION

Intourist Office, 45 East 49th St., New York, NY 10017. Tel: (212) 752-3030.

TRANS-SIBERIAN EXPRESS

It's been said that this is the shortest way around the world and the least expensive way to go from Europe to East Asia (Japan, Hong Kong etc.). As with any trip to Russia arrang ments must be made through Intourist. The entire trip from Moscow heading east to Nakhodka (North of Japan), takes approximately 11 days and costs in the neighborhood of $350. The train stops twice along the way and the scene tends to get boring. Travelers contemplating taking this route should check on weather conditions and occasional flare-ups on the Russian-Chinese border. Due to the above, trains are often canceled.

•

When you travel through Asia, you will find yourself part of massive fraternity of young travelers. All along the travel route in almost every major stop from Istanbul through Ind to Singapore you will find many meeting places for travelers These may be a hotel, a cafe or an American Express Office It is here that you will receive valuable information and travel tips from your fellow travelers that might not only save you money but could save your life. This information extremely valuable, up to date and not available in any guid books.

The map section on Asia will give you pertinent information collected through extensive research and actual travel experience.

NOTE: The suppress-the-hippie policy is in full force in this area.

Trails of the Sierra Madre

Now here's a guidebook that not only makes good armchair reading, but also has a whole raft load of practical information as well. Boudreau writes like others spin a tale and he answers your questions about who, where, and how, before you've asked them. It's all here in 77 pages planning the wilderness excursion to Mexico's Sierra Madre Mountains, getting there, gear and equipment, hiring guides and why you should, local customs, language and dealing with the people, names of individuals to contact in specific towns, problems to be aware of and much more all welded together with interesting tales and anecdotes. Anyone contemplating writing a guidebook could read Boudreau's book and they would be taking a good first step.

—AP

Trails of the Sierra Madre
Eugene Boudreau
1973; 77pp.
$3.75 postpaid
from:
Capra Press
631 State St.
Santa Barbara, CA 93101
or
Scrimshaw Press
149 Ninth St.
San Francisco, CA 94103
or Whole Earth

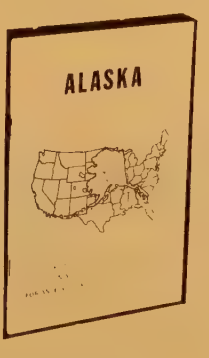
Guides are plentiful. Thousands of men and boys, capable of serving as competent and trustworthy guides, are available. Making contact with one is not difficult. When you arrive in the town or village where you plan to begin your trip, have a talk with the local school teacher (who may speak some English), store owner, police chief, priest, mayor, or head of the farmers' cooperative. Explain your need for an honest, sturdy yoeman of common sense who can handle stock animals and is well acquainted with the area.

Don't expect to find a guide who speaks English. It's mandatory that you know some Spanish unless you can find someone to explain to your prospective guide just what you want to do.

Alaska

Good source of background on the state if you're planning to migrate there. Covers housing and homesteading (defunct), transportation, recreation, cost of living, taxes, government, and job opportunities. Pretty straight forward with both the good and the bad.

—AP



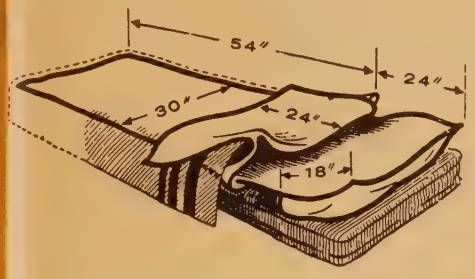
Alaska
Alaska Services
1973; 55pp.
$1.00 postpaid
from:
Alaska Services
Box 89171
Anchorage, AL 99508

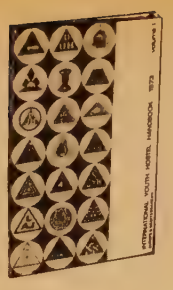
Youth Hosteling

Youth hosteling is a good way to expand your recreation and travel horizons. Regional youth hostels are very much akin to recreation clubs with members taking part in bicycling, hiking, river running, skiing and so forth. As a member of a regional group, though, it also means that you're a member of the international association, and the facilities and activities of hostels in other parts of the country and world are open to you, too, and that's a good incentive to travel. When you join a regional youth hostel council, and there are some 33 spread around the United States (all part of the American Youth Hostels, Inc.), you'll be tapping into the hosteler's grapevine via newsletters, bulletins, etc. that you receive on trip, travel, and recreation opportunities, both local and international. It's a good way to start meeting people and doing things. Membership, per annum, runs $5 for under 18 years of age, and $10 if you are older.

—AP

Sheet Sleeping Sack





International Youth Hostels Handbook 1973
(Vol. I Europe & Mediterranean)
International Youth Hostels Federation
1973; 160pp.
$2.85 postpaid

Volume II, Asia, Australasia, Africa & the Americas
1973; 260pp.
$2.80 postpaid

Youth Hostels 1973
Canadian Youth Hostels Assn. Handbook
In English and French
1973; 82pp in each language
$1.50 postpaid

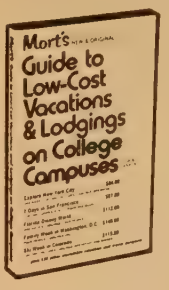
1973/74 Hostel Guide and Handbook
American Youth Hostels, Inc.
1973; 192pp.
$1.50 postpaid
(free with membership)

from:
American Youth Hostels, Inc.
National Campus
Delaplane, VA 222025

Mort's New & Original Guide to Low-Cost Vacations & Lodgings on College Campuses

For vacationers interested in minimal cost facilities in attractive settings, both urban and out-of-city, this book is a real find. College and university campuses, largely deserted in the summer vacation months, offer travelers a bargain package of comfortable accommodations, cultural/arts/sports/recreation resources, and often surroundings of natural beauty. Mort discusses 144 possible vacation sites, listing price ($2-$4 a day for lodging and 60¢–$2 per meal is average!), available activities nearby, available dates, and a contact name and address. The book is nicely laid out and easy to use—— happy holidays!

—Doris Herrick



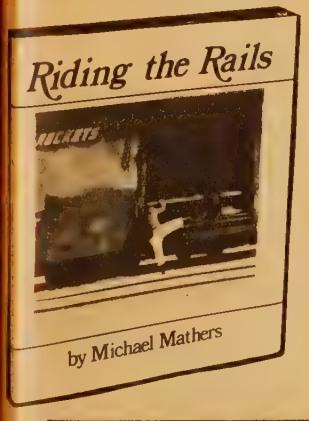
Mort's New & Original Guide to Low-Cost Vacations & Lodgings on College Campuses
Mort
1974; 160pp.
$4.50 postpaid

from:
Mort's Guide
CMG Publications, Inc.
Box 630
Princeton, NJ 08540
or Whole Earth

Riding the Rails

The railroad tramp has long had a firm place in the imagination and affection of Americans. He is the supreme dropout or castout, and he has connections back to all the generations of Americans who could not stay put. Mather's book with its superb and poignant photographs capture a legendary way of life. His vivid narrative, and transcripts of taped interviews with many freight riders, combine with the pictures to make an indelible record of a migrant male society that took on its classic characteristics during the great depression.

—AP



Riding the Rails
Michael Mathers
1973; 136pp.
$9.95 postpaid

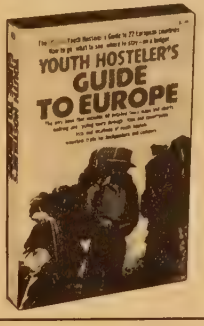
from:
Gambit, Inc.
53 Beacon St.
Boston, MA 02108
or Whole Earth

Put it this way: you piss out a boxcar once, you're hooked.

Youth Hosteler's Guide to Europe

An excellent guide to 22 European countries for the shoe string traveler and outdoor enthusiast. Includes 60 detailed tours, maps, and charts, walking and cycling tours through cities and countryside; lists and locations of youth hostels, and mountain trails for backpackers and campers. The section on each country starts off with background data on the geography, climate, people, language, religion, history, government, and so forth. Next is touring info covering transportation, maps, money, restaurants, clothing, and various outdoor activities. The major data on each country though, consists of the Touring Route schedule, main excursion routes through the country with mile-by-mile descriptions, side trips, excursion activities and hostels to stay at. Quite a guide for $2.95.

—AP



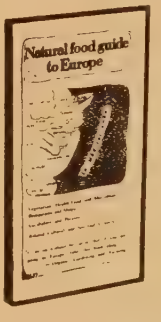
Youth Hosteler's Guide to Europe
Youth Hostels Association
1973; 491pp.
$2.95 postpaid

from:
Collier Books
Order Dept.
Front and Brown Sts.
Riverside, NJ 08075
or Whole Earth

Natural Food Guide to Europe

Where to eat and buy in Europe for vegetarians and health food freaks. Much personal commentary. Covers 14 countries and includes a language phrase section and food vocabulary in 5 languages. Great guide for the carrot juice and turnip for lunch bunch.

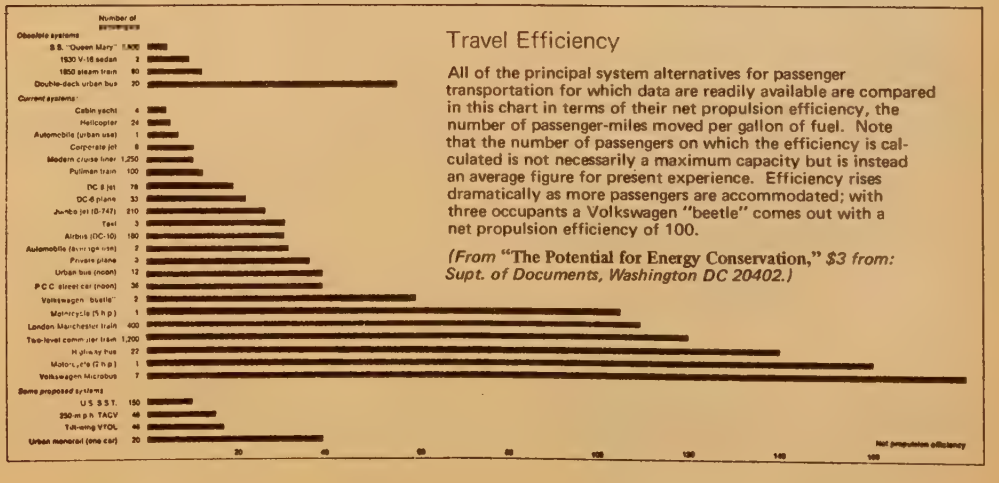
—AP



Natural Food Guide to Europe
Howard Simkowitz
1974; 111pp.
$1.95 postpaid

from:
Craftsbury Pub.
Craftsbury, VT 05826
or Whole Earth

Eng.: Is your food organic?
Fr.: Votre nourriture, est-elle biologique?
Ger.: Ist Ihr Nahrungsmittel ohne Chemikalien gewachsen?
Sp.: Es su comida organica?
It.: Il vostro cibo e biologico?



Travel Efficiency

All of the principal system alternatives for passenger transportation for which data are readily available are compared in this chart in terms of their net propulsion efficiency, the number of passenger-miles moved per gallon of fuel. Note that the number of passengers on which the efficiency is calculated is not necessarily a maximum capacity but is instead an average figure for present experience. Efficiency rises dramatically as more passengers are accommodated; with three occupants a Volkswagen "beetle" comes out with a net propulsion efficiency of 100.

(From "The Potential for Energy Conservation," $3 from: Supt. of Documents, Washington DC 20402.)

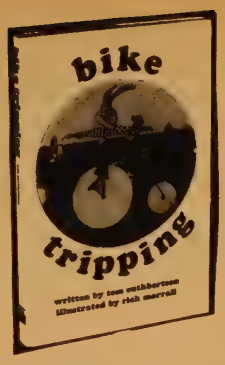
Bike Tripping

Tom Cuthbertson's companion volume to his maintenance/repair book (Pp. 253, 639) is a joyful, unpretentious and highly informative introduction to the proper and efficient use of a bike for transportation/recreation. Good pointers on cycling technique and a crucial life-and-limb-saving chapter on safety and the safe bike. The final chapter demystifies the dynamics of the frame, written by master frame-builder Al Eisentraut.

—Andrew Fluegelman (AF)

When passing a whole row of parked cars, look *into* the cars for drivers who might open their doors or pull out suddenly in front of you.

A great alternative to a 20 pound bike with a 20 pound lock and chain is a 40 pound "trashmo" special. Rick the artist bought a used one speed for me at a flea market for five bucks. Works like a charm. And nobody ever tries to steal it. For short around-town trips, commuting and shopping, or for school, the trashmo is the only way to go.



Bike Tripping
Tom Cuthbertson
1972; 172pp.
$3.00 postpaid
from:
Ten Speed Press
Box 4310
Berkeley, CA 94704
or Whole Earth

If you use a fancy bike for those trips, you have to get a huge lock and chain, or get ulcers, or both. Why not have two bikes—— a trashmo for local errands, and a super-bike for joy rides and longer trips. Just make sure you tend to the maintenance needs of your lovable old trashmo.

Several cuts above the trashmo bikes and the second hand three speeds are the luxury three speed, four speed, and five speed bikes. If you enjoy sitting upright, and yet want a good, comfortable reliable bike, look at some of the elegant three speeds like the Raleigh Superbe or the Moulton Collapsible Twenty (20 inch wheel) or their counterparts in other makes. These bikes are aristocrats. They are a joy to work on and pure luxury to ride. The 20 inch wheel bikes are all descendants or variations of the Moulton Four Speed, a magnificent and now rare breed designed by Alex Moulton of England. They look funny at first, like a kid's bike with giraffe tendencies. Don't laugh. Someday they may take over. They are very comfortable, especially those with built-in shock absorbers. They are also amazingly maneuverable, and the collapsible models are portable. You can take a fold-up Twenty on any mass transit vehicle. In the future this may become increasingly important. So think twice before you turn down the idea of a three or four speed, 20 inch wheel bike in favor of the Walter Mitty dream you have of yourself on a racing bike.

HOT ROD STINGRAY DIRT BIKES

In towns throughout the country there are highly maneuverable, custom made stingray bikes darting about. Bikes differ in different towns, depending o local terrain and riding style. In one town with dir roads for example, boys have developed bikes that handle like jack rabbits (if tuned), take high speed downhill dirt road rock-bashes yet keep going, are small enough to put in a car trunk when hitching and light enough to push up hills and trails easily. The Schwinn frame as shown in the photo is the basis for a strong balloon-tire bike.

Fragments of conversations with 15-16 yr. old bike builders: the stingray frame (intended by Schwinn for very small kids) is used because it's light, close to the ground, low center of gravity, best for tricks. If buying a new bike there are two types of stingray frames: the *regular* and the *junior*. Kids prefer the *junior* because it has a smaller sprocket, shorter cranks, is closer to the ground, is $10 cheaper. Two advantages of the *regular* though are higher seat pos heavier tire on rear. For heavy dirt road travel or jumping, get heavy duty rims and tires. The Schwi S-7 rim with 1-3/4" tire is middle weight; the S-2 rim with 2.125" tire is heavy weight. You can take the S-2 rim, drill it out, put in super strong spokes.

Tires: many designs. Some have flat surfaces, othe are more radial, which grip better on turns, but if they have big knobs will wear down fast (2-3 month heavy riding). An excellent knobby is the Goodyea Eagle MX. For lightness: aluminum motocross

Gearing Down 3-Speeds

Using a low gear is better exercise than straining in a high gear, and the flexing of your muscles assists your heart in pumping your blood. Spinning a low gear takes a little practice to get used to, but it will mean you can go farther and not be as tired when you get there. With lower gears you can carry larger loads more comfortably and pedal up steeper hills.

You can easily lower the gears on your 3-speed by simply replacing the rear sprocket with one with a greater number of teeth. Most adult size bicycles have 18 teeth on the rear sprocket. For Sturmey-Archer hubs, the largest sprocket made has 22 teeth. For Shimano the largest has 20 teeth. (The difference between 18 and 20 teeth may not be worth changing). Consult a repair book that covers 3-speed hubs for removal of the rear wheel and sprocket. *Remember which way the washers and sprocket were placed.* You'll also need several links of chain to add to your old one. When the wheel is replaced, the gears might need adjustmen check your repair book. While you're at it, oil your chain.

—Howard Sutherland

Anybody's Bike Book

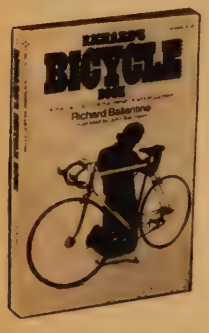
Despite the flood of bicycle books in the past few years, Tom Cuthbertsons's friendly guide (reviewed in the **Last Catalog**, *Pg.* **253***) still reigns as the best introduction to bicycle maintenance and repair. This is definitely the manual to ease you through your first few troubleshooting and overhaul jobs.*

—AF

Richard's Bicycle Book

Bicycle selection, riding, touring, racing, elementary maintenance, history, lore and general enjoyment—— all presented clearly and straightforwardly in a single inexpensive volume. This is a "best buy" if you can justify owning only one bicycle book, or if you want to round out your cycling reference library.

—AF



Richard's Bicycle Book
Richard Ballantine
1972; 250pp.
$1.95 postpaid
from:
Ballantine Books
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Hold a chalk or pencil at the *outer edge* of the rim while you spin the wheel so that the high spots are marked. Working one half to 1 turn at a time, tighten the spokes at the chalk mark (*counterclockwise*) and loosen them opposite the chalk mark. Continue until wheel is round.

Hold pencil or chalk at *side* of rim so that side to side wobbles are marked. Working 1/2 to 1 turn at a time, and in groups of 4 to 6 spokes, tighten up the spokes opposite the chalk mark and loosen the ones next to it:

Tighten or loosen the spokes which are in the center of the chalk marks a little more than the ones at the edges of the marks. When you have finally succeeded, or compromised, run your finger around the rim and check for protruding spoke ends. File protruders down.

Last Catalog Update

Hello Andrew:

I hope you haven't forgotten I was going to do some stuff on bicycles or given up on me. I apologise for taking so long. I started work on it right away but everything I wrote turned into an introduction for a book on "How to save the world thru cycling." Then I broke my leg—— got caught by a jerk opening his car door into my path.

Here are some suggestions for the bicycle section: I seriously suggest you cease listing Eugene Sloan's **Complete Book of Bicycling** (**Last Catalog**, Pg. **253**). This was the first book to score on the "boom." As a whole, it's neither "complete" nor very good. Fortunately, it has also become fairly outdated and this gives a painless excuse to delist it.

I would suggest that you also not mention specific bicycles. There is none in the general-interest price range that is so outstanding as to warrant mention. On the other hand, the dealer is very important. It is not fair to recommend a brand since this will perhaps make people buy the bike without regard to who they buy it from. In the same vein, the old list of "best bike shops" was made by a fairly naive Turin employee many years ago. I do not think, despite my and Turin's interest in the matter, that specific shops should be mentioned.

Well, that should convince you that I still exist, which was the idea. I look forward to hearing from you.

Peace,

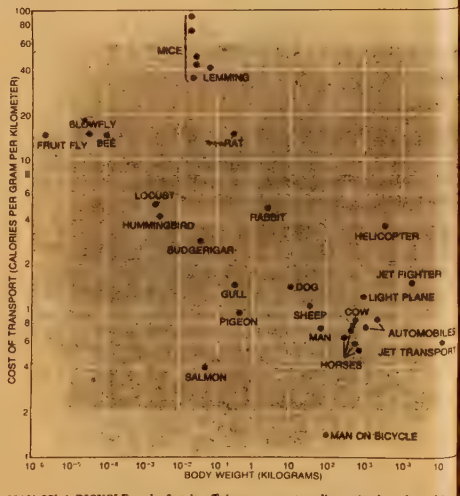
John Hart
c/o Pellaton
Rue de Monthoux, 8
1201 Geneve, Suisse

John Hart is the director of European Operations for the Turin Group of bike shops.

—AF

Energy Efficiency

Not only is bicycle travel human-scaled, healthful and non-polluting, but it turns out to be more efficient than jet pla salmon or seagulls:



MAN ON A BICYCLE ranks first in efficiency among traveling animals and machine terms of energy consumed in moving a certain distance as a function of body weight. rate of energy consumption for a bicyclist (about .15 calorie per gram per kilometer) i proximately a fifth of that for an unaided walking man (about .75 calorie per gram kilometer). With the exception of the black point representing the bicyclist (*lower ri* this graph is based on data originally compiled by Vance A. Tucker of Duke Univer

—from "Bicycle Technology" by S. S. Wilson, Scientific American, *March, 1973.*

handlebars, knock off kickstand bracket (braze holes shut). Unbendable seat post: solid aluminum (find a metal lathe) or get the Schwinn 14" seatpost. Seat: Schwinn accessory seat. Cranks: always Schwinn: important because you stand on them (weight not on seat) when going downhill or jumping.

As kids build up their bikes they learn how everything is put together. They're able to tune them: true the rims; clean out, repack, adjust or replace bearings; make sure everything is tight (important for fast downhill safety). They don't like gears because without, braking is better, bike lighter. They gear stingrays low (typical is 6" front sprocket). Shorter cranks mean peddles are higher, less scraping when cornering. For bigger than 20" tire bikes, get the same design Schwinn frame: the Typhoon. (There are some crummy imitations to watch out for.) I'm 5.7", 150 lbs, have a 24" bike for dirt riding.

There's lore: frames from a certain year and earlier were of higher strength steel; the little screws that hold on the Schwinn nameplate are rare. Everyone really into it has his own preferences, and there are countless possible variations with different goose-necks, seat posts, hubs, rims, spokes and tires.

Unheralded village technology as practiced by the kids of America. Ride on.

—Lloyd Kahn

The Yamaha

We tried a Yamaha "Moto-Bike" the other day. It's a heavy-duty bicycle about the size of a Schwinn Sting Ray, but with a full motorcycle suspension at both wheels. Results are ride and handling characteristics that border on unbelievable. Since a bike made this way doesn't need a smooth surface for safe comfortable travel, bike routes wouldn't have to be made of high energy asphalt and would also be a lot cheaper to make, and then there could be more of them, and. . . Try one at your Yamaha dealer. Costs about $125.

—JB

Super Bikes?

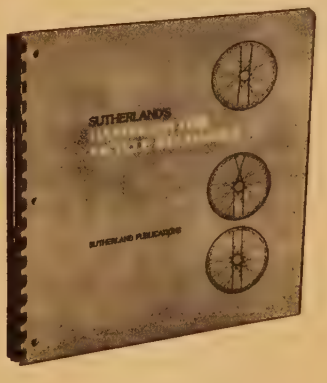
While hanging out and working on the Epilog we've been talking about bikes. Andrew has an ultra-light 10 speed that he rides up to 100 miles per day. Jay has had a great deal of experience with all sorts of bikes and understands the technology well. I'm primarily interested in a dirt road bike so I can cover a lot of distance off the pavement. We've been talking about blending the technologies: can you adapt anything off the 10 speeds that would give you easier peddling on dirt? Or any facet of the motocross dirt bikes that would make a ten speed tougher? Is there a Volkswagen of bikes? We'd like to hear from people that have built good bikes—— home assembled combinations not currently known in available literature. Heavy tired cruisers, long-range lightweights, combinations and mavericks. If there's enough information we'll do an article in **The CoEvolution Quarterly** (Pg. 450) on 5-10 outstanding bikes, including photo, clear diagrams, and parts list including price and availability. If you've built a bike and want to communicate, write us at Box 428, Sausalito, CA, 94965.

—LK

Sutherland's Handbook for Bicycle Mechanics

The first and only book that comes to grips with the fact that international bicycle parts are woefully un-interchangeable. A complete lexicon of very technical specifications (what parts can be made to fit and what looks like it might work but won't)—— all presented in an elegantly clear format. This handbook is obviously of no use to you unless you own a half-dozen different bicycles, but you should bring it to the attention of your local bike shop, because with it they'll be able to give you vastly better service. Also a valuable reference book to carry in a "sag wagon" supporting a group of cross-country tourists.

—AF



Sutherland's Handbook for Bicycle Mechanics
Howard Sutherland
1974; 60pp.
$5.95 postpaid

from:
Sutherland Publications
Box 9601
Berkeley, CA 94709

For instance Italian headsets and English headsets would seem to be interchangeable with a class A fit.

Italian headset threads	25.4mm x 24 TPI
English headset threads	1" x 24 TPI

Since 25.4mm = 1 inch it would seem they were the same. However, you will notice by comparing the Italian and the English standard for cutting threads that the angle of the threads is different. There will be damage, although slight, to an English fork fitted with an Italian headset or an Italian fork fitted with an English headset. For this reason it should be considered a Class B fit.

Xyzyx Bicycle Repair Aids

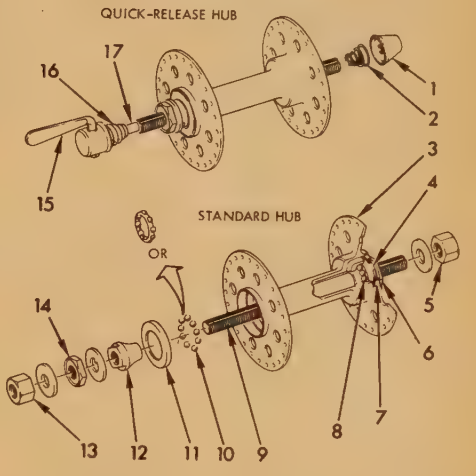
These are the clearest, most comprehensive guides to basic repair currently in print. Novice repairpeople may find the instructions a bit terse, but once you've learned the essentials, the beautifully programmed sequential instructions and well-keyed diagrams provide an outstanding checklist for every job that you're ever likely to attempt.

—AF

Coaster & 3-Speed Bicycle Repair
Xyzyx Consumer Aid
1972; 142pp.
$4.95 postpaid

Derailleur 5, 10, & 15 Speed Bicycle Repair
Xyzyx Consumer Aid
1972; 132pp.
$3.95 postpaid

both from:
Crown Publishers
419 Park Ave. South
New York, NY 10016
or Whole Earth



OVERHAUL FRONT HUB

1. Using solvent, clean all parts. Wipe all parts dry. Check that bearings (8,10) are not worn or pitted.
2. Slowly roll axle (9) on smooth surface. Check that axle is not bent.
3. Apply grease to bearing surfaces on inside of hub (3). Apply to bearings (8,10) if bearings are retained.
4. Place bearings (8) in hub (3). Install dust cap (7), if removed.
5. Install cone (4) on axle (9) to distance measured when removed.
6. Install axle (9) through bearings (8).
7. Place bearings (10) in hub (3). Install dust cap (11), if removed. Install cone (12) fingertight. Loosen cone one turn.
8. Install washers and locknuts (6,14).

If quick-release unit (15) was not removed, go to Step 9.

9. Insert quick-release shaft (17) and spring (16) into axle (9). Install spring (2) and adjusting nut(1). Go to Step 11.
10. Install washers and axle nuts (5,13)
11. Adjust front hub (Page 41).

OVERHAUL ENDS HERE

•

Always keep in mind that you are handling easily damaged parts. Lightweight alloys have been used in place of steel for the construction of many parts, thereby shaving pounds from the weight of the bicycle. However, these alloys are generally not as rugged as steel and can be damaged quite easily. So when you are working on your bicycle always remember—— use care, don't force parts.

North American Bicycle Atlas

Well-organized and reliable American Youth Hostels, Inc. has put together a compendium of 88 one-to-two-week trips and 84 weekend excursions covering 37 states, 10 provinces, Mexico and Central America—— each with complete route descriptions and graded for difficulty. Also a good section on basic touring equipment and technique, plus information on cycling abroad. Ten minutes browsing here and you'll be unable to resist setting off on one of these jaunts or planning one of your own.

—AF

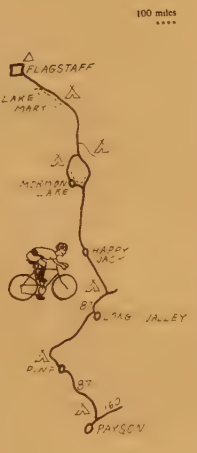
North American Bicycle Atlas
(Third Edition)
Warren Asa
1973; 192pp.
$3.15 postpaid
from:
American Youth Hostels, Inc.
National Campus
Delaplane, VA 22025
or Whole Earth

Flagstaff Forest Flyer
Arizona

In the high country of north-central Arizona there are some lightly traveled roads that make for excellent cycling. One such route starts in Flagstaff and goes south to Mormon Lake, Happy Jack, Long Valley, and Payson. If you wish to go still further, turn east at Payson and continue on route 160 and 277 to Snowflake or Show Low.

In Flagstaff stay at the youth hostel nestled in its own pine forest. You will be camping at Forest Service sites the remainder of the trip. There are plenty of these along this route. Some of them are shown on the map.

This is high country with elevations ranging from 5,500 to 7,000 feet. It is best to start in Flagstaff and travel south. This trip is rated four stars because of the high elevation and the necessity of camping. However, it is a relatively short trip so you can view it as one of the easiest of the four star trips. Many families with low geared cycles and lightweight camping equipment could try this one during the summer or early fall. Also see "Canyons and Mesas."



Cannondale's "Bugger" ($44.50)

Panniers—— Buggers

- *Eclipse's "Tour-Lite" pannier packs have a unique wedge design that distributes the load closer to the rear axle for better stability: permits conversion to a day pack.*
- *Bellwether is developing a set of drawstring-laced panniers that expand to accommodate two fully-loaded shopping bags.*
- *Cannondale's "Bugger" is the best way to transport heavy loads by bicycle: no significant extra weight is placed on the rear wheel and spokes.*

All three companies produce full lines of well-made and thoughtfully designed touring equipment. Check their current catalogs before selecting the gear best suited for your trip.

—AF

Catalogs
(free) from:
Eclipse, Inc.
P.O. Box 372
Ann Arbor, MI 48107

Bellwether
1161 Mission St.
San Francisco, CA 94103

Cannondale Corporation
35 Pulaski Street
Stamford, CT 06902

Eclipse's convertible pannier-daypack ($35.50/pr., with shoulder straps.)

Cycletouring

The bi-monthly magazine of the Cyclist's Touring Club is available to non-members for $3/year (£1.20). Write C.T.C., 69 Meadrow, Godalming, Surrey, England. Even if you can't justify joining the CTC, at least buy the magazine. In addition to articles on English and continental touring, and the club news, they have the least commercial and most innovative technical articles I have ever read. The magazines are small but really well done . I wish it came out more often.

—John Hart

Toe Clips

NEVER USE METAL PEDALS WITHOUT TOE CLIPS AND STRAPS. Quite apart from the fantastic increase in pedalling efficiency they produce, without them, your feet are likely to slip from the pedals when you are pedalling hard and this always causes a nasty fall. Toe clips are easy to get used to.

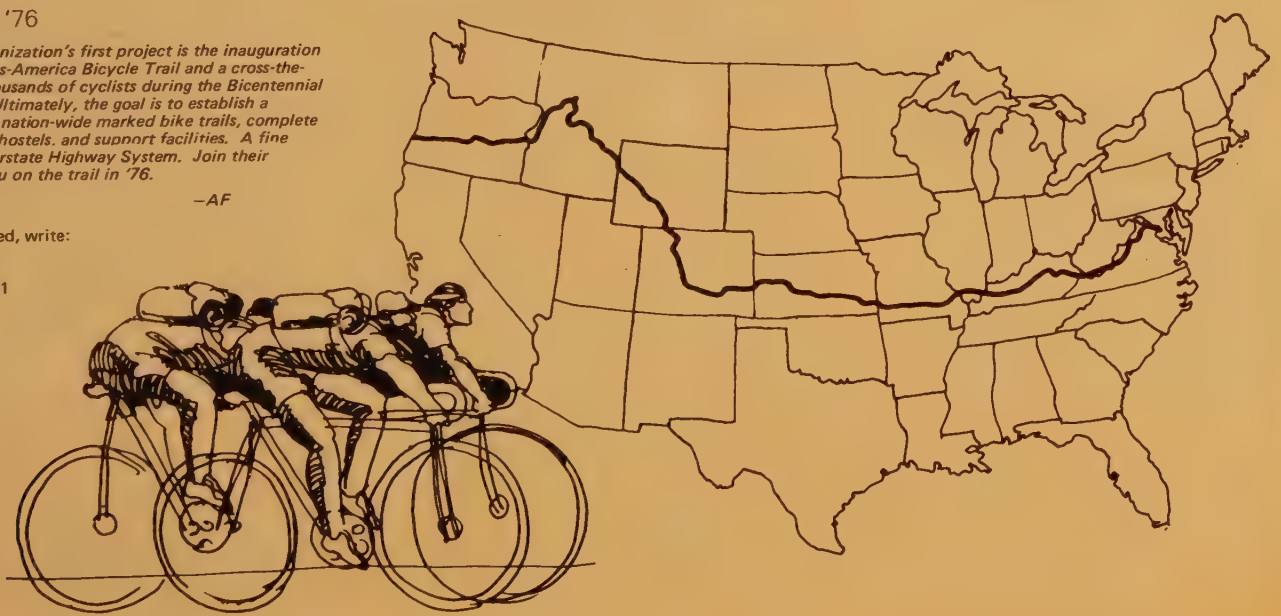
—John Hart

Bikecentennial '76

This non-profit organization's first project is the inauguration of a 3500 mile Trans-America Bicycle Trail and a cross-the-country tour by thousands of cyclists during the Bicentennial Summer of 1976. Ultimately, the goal is to establish a complete system of nation-wide marked bike trails, complete with campgrounds, hostels, and support facilities. A fine antidote to the Interstate Highway System. Join their mailing list. See you on the trail in '76.

—AF

To be kept informed, write:
Bikecentennial '76
P.O. 1034
Missoula, MT 59801



Racing Ordinary, 1887

Safety Racer, 1892

League of American Wheelmen

In 1898, this cyclist's organization had over 100,000 members and lobbied for the nation's first paved roads, off of which they were promptly driven by the automobile. Today they have local chapters across the country, and are active advocates for the protection and support of the bicycle as supplemental safe transportation. They're also the best people to contact about joining or organizing a tour. Don't be put off by the name—– lots of female peddlers in their ranks.

—AF

For information, write:

League of American Wheelmen
19 South Bothwell
Palatine, IL 60067

Bicycle Security

- There is no way to make an exposed bicycle positively theft-proof.
- Always lock your bike in a place where attempts at lock-busting will be obvious to passers-by.
- A lightweight cable or chain will foil only a jump-on-and-pedal thief.
- An un-locked, un-attended bicycle will disappear.

—AF

Lock/Chain for Commuters

If you're using your bike for commuting, the best security solution is a 9/32" "Cam-alloy" case-hardened chain with a plastic tube around it, and a substantial case-hardened padlock. This will be heavy, *so leave it locked overnight where you park. Plan on spending at least $20. Better yet, petition your employer to provide storage space indoors.*

—AF

Be Safe —– Be Seen

- Reflective Vest: A very light nylon-screen "sleeveless serape" which has bands of Day-Glo and reflective material sewn on the front and back is made by the American Safety Flag Co. (Division of Vogue Industries) in Pawtucket, Rhode Island. The mesh allows for air circulation and the vest is practically (physically) unnoticeable in use. The makers claim that their pattern of reflective and Day-Glo materials makes for better visibility than if the whole vest glowed. It sure makes you show up.
- Big Red Taillights: These are made by several companies, mostly in England. They use two D-cells and are quite bright and the batteries last much longer than the C-cells in armlights. Get a light that is visible from both the side and rear and mount it so that it shows through the wheel to the other side. Ever-Ready (U.K.) and Star-lite are two brand names that are good. Being British, the Ever-ready must be mounted on the right side: the Star-lite is more cosmopolitan and can go on either side. Try not to let the bike fall over on the tail-light.
- Headlight: At night, a headlight which can be easily seen by someone "off the starboard bow" is your main protection against somebody opening his door into your path. This, to me, is the final argument against reliance on armlights for nighttime visibility. (This was how I got my broken leg). Headlights are also useful to help you see where you are going. Generator lights are the brightest and thus the most impressive and useful. They also reduce your reliance on the energy vendors. Be sure that the light you buy goes out to the side as well as ahead, but take care to keep it out of your eyes as it hampers your night vision.

—John Hart

Kryptonite Bike Lock

The current state-of-the-art in portable bicycle locks. The Model III weighs 1.75 pounds and will resist even the most determined and ingenious thief for several minutes, during which his theft attempt will be obvious to anyone nearby. A specially-designed carrying bracket incorporates the entire device into the frame for rattleless riding.

—AF

Kryptonite III Bike Lock

$18.95 postpaid
from:

KBL Corporation
20 East Concord St.
Boston, MA 02118
or Whole Earth

Rally Racks

It is only dawning on people and planners that bicycles have to be thought of as a transportation system. Bike lanes are an obvious requirement; less obvious is adequate provision for public bicycle parking. Rally Enterprises manufactures a line of bike racks, including a coin-operated self-locking rack (unit cost: $74.95). Bring this up at your next city council/student body/union meeting.

—AF

Rally Racks

Catalog and information
available from:
Rally Enterprises, Inc.
P.O. Box 601
Mill Valley, CA 94941

13

BETTER YOUR EXIT STRIKES AGAIN

In town there's a supermarket with a truck parked in front, filled with cardboard cartons containing foodstuffs. A slide of metal rollers protrudes from the open door on the side of the truck down onto the sidewalk. A separate section of slide protrudes up onto the sidewalk from the basement of the supermarket.

A young black man is standing on the sidewalk between the two sections of slide. A second young black man inside the truck is rolling carton after carton down the slide. The first man catches each carton and puts it on the rollers of the slide going into the basement. He stops periodically to let folks walking on the sidewalk pass through.

You Are the Sunshine of My Life, Stevie Wonder is radio-serenading Rosebud Zwalyimeh and Tongue Fu, while she drives the little-American-flag-decal-covered Volkswagen into town, both of them eating *Maharishi Hashish Yogurt* along the way.

She parks the car in the supermarket parking lot, and they walk toward the entrance holding hands.

The slide to the basement gets jammed. The man on the sidewalk starts to adjust the bunched-up cartons, but the man in the truck continues sliding down more cartons. Now the man on the sidewalk must use his other hand in order to keep them back at the same time.

"Hold it!" he calls out. "Hold it!"

He's stuck there, with his arms outstretched, inadvertently blocking the only passageway that had remained on the sidewalk.

Rosebud and Tongue Fu arrive at this point. She spontaneously kisses the helpless man on the cheek. Letting go of Tongue Fu's hand, she ducks under the laughing black man's arm. . . .

Flashiebackie:

A black activist, the boyfriend of a younger Rosebud Zwalyimeh, is laughing at her.

"I'm serious," she says. "It gnaws at me to try and identify with *One Man, One Vote*."

"That's just semantics," he says. "I mean, you know, man embraces woman." He attempts to hug her but she pulls away.

"No. I can't separate our personal relationship from the movement. I'm through with double standards. I want equality."

"Do you know that when I was a kid, I wanted to be white so badly that I used a razor blade to make a part in my kinky hair?"

"Well, I worked in a law office and had to bleach the hair on my legs so it wouldn't show through my stockings. So I've been niggerized too."

"We're certainly not the same emotionally, though. I could have a casual affair, but it's different with chicks. You have to get involved with every guy you sleep with."

"First of all, that's not necessarily true. But I just want the option. I have the right to get involved with any guy I sleep with. That's the risk of freedom. I'm not your slave."

"You mean I'm not supposed to ever get jealous?"

"That's the last politics," she says. "Jealousy is the difference between love and possession."

"But it's always been so good with us in bed."

"That's not enough any more."

"Sheeeit." He forces himself sexually upon her.

Just before he comes, he says, "I love you."

"Well," she sobs, "you finally made it. You've become white ...."

Tongue Fu kisses the laughing black man on the other cheek, ducks under his other arm and rejoins hands with Rosebud. They separate again to help get the cartons straightened out on the slide. Then they head for the supermarket entrance.

"Open, sesame seed," Rosebud gestures, and the automatic glass door obeys her command.

Tongue Fu gives her a ride in a supermarket cart.

Rosebud puts a can of frozen orange juice down his back.

They go on the little rides that are there to divert children from mischief.

Then they examine with a haughty air the gourmet delicacy rack.

Tongue Fu picks up a package of truffles and asks a passing clerk, "What are these?"

"A dollar-forty-nine."

Rosebud strolls alongside the meat display counter, printing on the respective price cards, *Dead Cows* and *Dead Pigs* and *Dead Chickens*, with a magic marker.

Suddenly three gunshots are heard from outside.

Frizzie-haired Innocence from Camp Crap has apparently killed both of those young black men and then herself. In her pocket is found this handwritten suicide note:

There is going to be famine in the United States as well as Pakistan.

I cannot bear the thought of living with the knowledge that people are starving to death.

I shall take the lives of two others along with my own.

They are integral parts in the chain of food distribution.

They are traitors to their blackness.

In keeping with the principle of Better Your Exit, I have decided to make an example of them.

There will be more such examples by other members unless everyone starts fasting.

This is the most effective way to make that demand known.

I apologize for disturbing your afternoon.

—BYE Communication #2

"It doesn't make any sense," says Rosebud. "She was the one who said 'Live your alternative' on *TV Ching*."

"Perhaps," replies Tongue Fu, "this was her alternative."

[Continued, page 647]

Automotive Operation and Maintenance

An experienced list of disasters that can befall you and your vehicle when you're on your own in the jungle, bush or boonies, and solutions that require only rudimentary skills and primitive resources. This manual should be tucked under your seat before you drive beyond hiking distance from automotive civilization.

—AF

This looks to me like the best car/truck book in print.

—SB

I agree.

—JB

Automotive Operation and Maintenance
E. Christopher Cone
1973; 200pp.
$4.00 postpaid

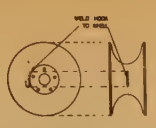
from:
Volunteers in Technical Assistance
3706 Rhode Island Ave.
Mt. Rainier, MD 20822

A Diesel-powered vehicle such as the Unimog or a Diesel Land Rover offers the advantage of having no ignition system. It is consequently much more reliable for fording than a gasoline engine.

■

As outlined in section 2.01, it is well worth the trouble to remove the doors if a submerging accident is even a remote possibility. This simple expedient can be a life-saver. If submerging is inevitable, it is important to shut off the engine before it goes under water. This will prevent the pistons from drawing water into the cylinders and trying to compress it as they do the gas-air vapor. Water cannot be compressed, and the engine will be ruined in the attempt.

•



WELD A HOOK onto a wheel for use in an emergency as a replacement for natural traction. Weld the hook in such a way that it would be inside the tire if a tire were fitted to the wheel. When stuck, jack up and remove the slipping wheel and replace it with the prepared wheel. Attach a rope to the hook on the wheel and attach the other end to a solid anchor such as a tree or rock. Drive the car forward, letting the hook hold the rope and wind it onto the wheel like a winch.

•

CLUTCH SLIPPING may be due to oil on the clutch facing. As a temporary remedy, block the plates apart by holding the pedal down with a stick over-night. Sometimes the oil can be burned out by slipping the clutch under load. It may be useful to blow a gritty type household cleanser such as Comet, Ajax, etc. into the clutch using a small hose inserted in the drain plug hole.

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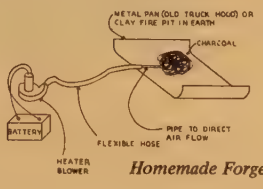
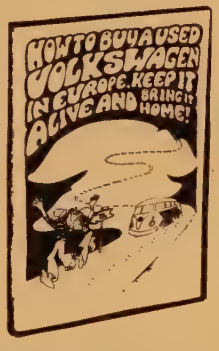


Homemade Forge

How to Buy a Used Volkswagen in Europe, Keep it Alive, and Bring it Home

It is my great pleasure to announce the arrival of a truly competent guide book, and you can't hardly find them these days! It's as complete as you'd dare hope, beautifully illustrated, well written by people who know how to do it and like doing it, and a bargain price too. You need information? OK examples: How to read German VW ads, how to dicker, lists of European dealers, Customs, Legal matters, Police, How to make a bed in a Bus, and how to ask for the parts to do that, in German, lists of VW parts and services in several languages, etc, and etc. Some of the information will be useful for cars other than VW. John Wilkes has done a really good job, and this book should be an example to others who are writing How-To manuals.

—JB

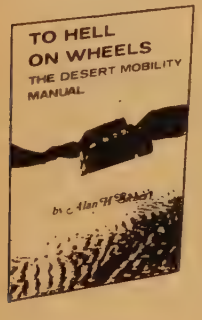


How to Buy a Used Volkswagen in Europe, Keep it Alive, and Bring it Home
John Wilkes
1973; 144pp.
$3.25 postpaid
from:
Ten Speed Press
Box 4310
Berkeley, CA 94704
or Whole Earth

To Hell on Wheels

You'd expect from the name and cover that this is a four-wheeler's tear-up-the-desert book. It isn't. The author wants you to be able to get out into the desert, stay there, and return safely. Driving technique, survival, tools, first aid, navigation, and vehicle extraction are all covered neatly by a man who's done it.

—JB



To Hell On Wheels
Alan H. Siebert
1974; 64pp.
$2.95 postpaid
from:
Brown Burro Press
P.O. Box 2863-D
Pasadena, CA 91105
or Whole Earth

To Tell Direction from Barrel Cactus:

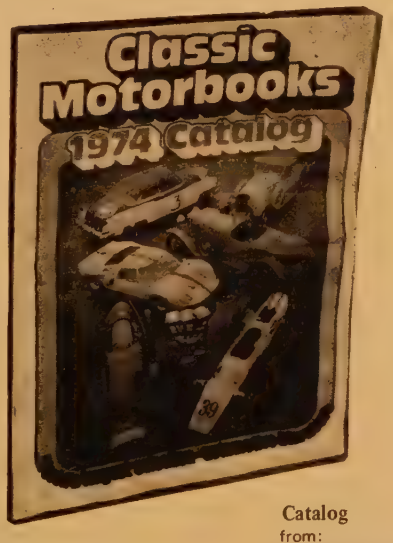
The plane of the top of the plant leans to the Southwest. The blossoms are on the south side of cacti.

Use multiple signal systems when you think a search party may be near.

Classic Motorbooks Catalog

These people specialize in automobile books and from the looks of their large-format, 38-page, color catalog, they've got everything!*— Coffee-table books on classic cars, restoration handbooks, technical manuals, shop manuals, American cars, European cars, old, new, for pleasure, racing, even farm tractors, plus if you've been looking for a certain periodical, like* Hemming's Motor News *(Pg. 250) or a rag that deals with only* Ferraris, *or actually any auto magazine, they'll set you up with a subscription, too.*

—Bob Cunningham

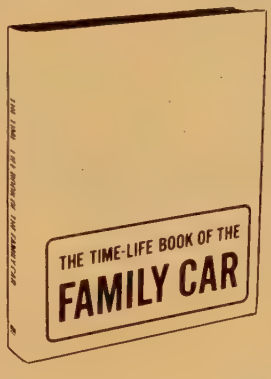


Catalog
from:
Classic Motorbooks
3106 West Lake St.
Minneapolis, MN 55416

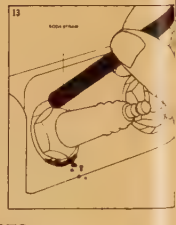
The Time-Life Book of the Family Car

For people who want to know everything they can handle about the late-model "Typical American Car." Good Ms. contact is insured by an editorial staff nearly 1/2 of women History, trouble shooting, maintenance, trailer towing, all here, and exceptionally well illustrated in the usual TimeLife manner. The repair chapter is not up to the standards set by John Muir's VW book (Pg. 248), but you could tune a 66 chevvy from it if you had its manual too. Some suggestions are excessively general; there are tire mounting instructions that would be dangerous on a front-wheel drive car. But the book is really good discussing buying, financing and insuring. Hard-to-find facts are given: (For a U.S. compact, multiply the window price by .85 and you have dealer's cost) and no-kidding figures (the average family spends $1817.67 a year on their car, not including payments!). Political and environmental aspects of the beast are only lightly touched upon, but pollution controls are discussed. The whole thing is first class, and you pay for it. Would have been just as useful to a lot more people as a three dollar paperback.

—JB



The Time-Life Boo of the Family Car
The Editors of Time-L Books
1973; 357pp.
$12.95 postpaid
from:
Time-Life Books
Little, Brown & Co, In
200 West St.
Waltham, MA 02154
or Whole Earth



Blowing debris from the spark-plug recess

THE LIFE EXPECTANCY OF PARTS

PART	MINIMUM MILES
Automatic transmission	50,000 to 75,000
Radiator	75,000
Pistons	100,000
Connecting rods	100,000
Piston rings	100,000
Brake drums, front & rear	100,000
Brake-drum linings	20,000 to 25,000
Wheel cylinders, on each brake	40,000
Valves	100,000
Shock absorbers	20,000
Wheel bearings	100,000
Muffler	20,000 to 25,000
Exhaust pipe	20,000 to 25,000
Tailpipe	20,000 to 25,000
Carburetor	50,000 to 70,000
Fuel pump	50,000 to 75,000

Basic Auto Repair Manual

I stick happily to my original review in WEC (Pg. 249) (exc I'd delete the year designation for VW.) This is still the bes book I know for getting into car repairs yourself. Best thin about it is that it is written in a way that gives you the cour to start working for the first time on that mysterious beast sitting in the driveway. Updated to include smog equipmen

—JB

Basic Auto Repair Manual, 5th Ed.
Spencer Murray, Ed.
1973; 384pp.
$3.95 postpaid

from:
Peterson Pub. Co.
8490 Sunset Blvd.
Los Angeles, CA 90069
or Whole Earth

The Super Catalog of Car Parts & Accessories

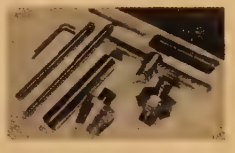
Where do you find a water pump for a 1935 Mack truck?; an owner's manual for an Allard?; titanium front end parts for a jeep? This catalog of catalogs has the answers. More than 1000 firms, clubs and factories listed with complete description of services and products. Mostly information that is not well known, gathered from a very wide range of sources. Uncommon quality and rarity are stressed, making this a real service for people still enchanted by cars.

—JB

The Super Catalog of Car Parts & Accessories
John Hirsch
1974; 310pp.
$4.95 postpaid
from:
Workman Pub. Co., Inc.
231 East 51st St.
New York, NY 10022
or Whole Earth

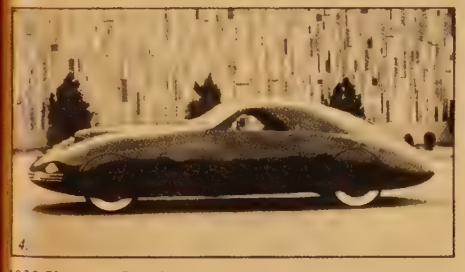
The Brentwood Company
P.O. Box 727
Brentwood, TN 37027

Will custom make extruded or molded rubber items for any car. While it is usually impractical to have single items custom-made, as few as 25 copies of a molded item, or a few hundred feet of extruded goods, can be economically feasible. Car clubs take note. Free information.



Volks Tool Supply
P.O. Box 660
Houston, TX 77001

Owner Nelson Antosh plans to expand his inventory in the future and issue an even larger catalog. Meanwhile the current catalog, which lists 93 items and specifies the assemblies they are designed to fit, is an education in itself. Catalog. $.50.



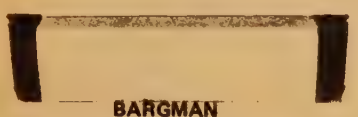
1938 Phantom Corsair

Viking Camper Supply

Hardware for motor homes and trailers. These items are often easily adapted to handmade houses, and the large selection of 12 volt electrical equipment could be used with DynaTechnology wind generator (Pg. 537).

—JB

Catalog
from:
Viking Camper Supply Inc.
99 Glenwood Ave.
Minneapolis, MN 55403

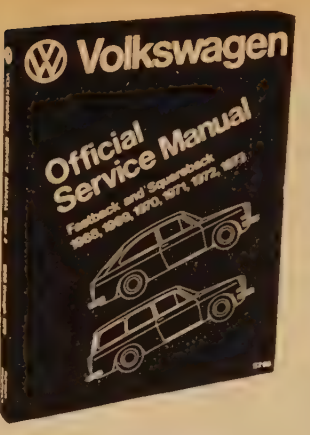


BARGMAN
FLUORESCENT LIGHT
Can be used with converter or battery. Voltage range - DC battery 10.8–15.5v Converter input 10.6–13.2v. Full output when operating from converter. Long life. switch. Measures 20" x 5"
M-69 . . . Wt. 2 lbs. $25.00

Volkswagen Official Service Manuals

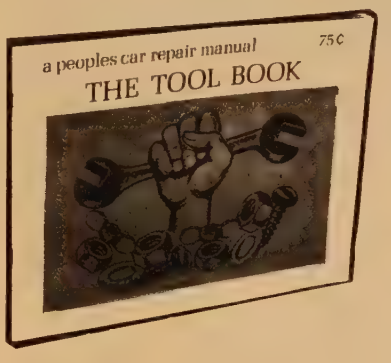
The late-model VW are not quite the simple things that the earlier ones were. John Muir's book (Pg. 248) continues to be the way to go for the oldies, but for the new ones, particularly those with extensive smog equipment, this manual is probably necessary. I say necessary, because you can't just walk up to a 74 Super Beetle and diddle the carb screws and have it run right. No way. There are also subtle changes in setttings and front end parts in these years that must be done right. You won't be able to fake it as with the old models. This manual is, as might be expected, competent in every way. Sharp photos of everything. Explicit directions. Warnings here and there, where the temptation to get around the factory tendency to specify procedures that sell parts would prove fatal. Complete from routine maintenance through overhaul. Best wiring diagrams I've ever seen. In color yet. (Also see Pg. 669)

—JB



Volkswagen Official Service Manual
Super Beetle, Beetle & Karmann Ghia 1970-74 (Only)
1974; 408pp.
$9.95 postpaid

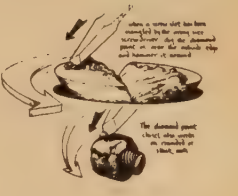
Volkswagen Official Service Manual
Fastback and Squareback 1968-73 (Only)
1974; 424pp.
$9.95 postpaid
from:
Your VW dealer
or
Robert Bentley Inc.
872 Massachusetts Ave.
Cambridge, MA 02139
or Whole Earth



The Tool Book

At first glance **The Tool Book** *looks like a first grade primer for mechanics, but then when you get into it there's a lot of good information, suggestions and tips on the proper care and use of basic tools—stuff you probably didn't realize you didn't know. A bargain at 75¢.*

—AP

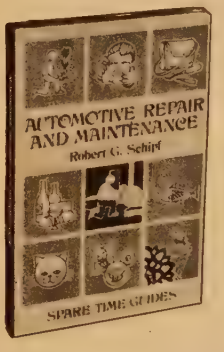


The Tool Book
1973; 36pp.
$ .75 postpaid
from:
Peoples Press
968 Valencia St.
San Francisco, CA 94110
or Whole Earth

Automotive Repair and Maintenance

A comprehensive bibliography of books concerning the care and feeding of vehicles, (including motorcycles). With brief descriptions of each, and considerable editorial opinion as to merits. Expensive, but try and find this information anywhere else. Have your library get it.

—JB



Automotive Repair and Maintenance
Robert G. Schipf
1973; 119pp
$7.50 postpaid
Libraries Unlimited, Inc.
P.O. Box 263
Littleton, CO 80120

217. Dempsey, Paul. **How to Repair Small Gasoline Engines.** Blue Ridge Summit, Penn., TAB Books, 1972. 288 p. illus. index. (TAB Book No. 617) $8.95. LC 72-87454.

This is a very handy little book about repairing those lawn mower, power saw, boat and other small two-stroke or four-stroke engines. The ignition, fuel, and electrical systems are covered, as are the engine parts, power transmissions and accessories and controls (starters, mufflers, etc.). There are chapters about basic engine operation and troubleshooting and about opening a commercial shop. The repair hints are based on a "frequency of repair" record which has been compiled for a number of years. Good for the home repairman. The information can also be used for repairing scooter and other small vehicle engines.

Basic Bodywork and Painting

Just about everything you can expect to get from a book on this subject is presented here clearly. But it should be obvious that bodywork is largely a learned skill, and you'll learn it from messing up some metal. If you know nothing about the tools and how to use them, this book will get you started and is well worth the two dollars. Might be useful for those into metal sculpture too.

—JB

Basic Bodywork and Painting
Spence Murray, Ed.
1973; 192pp.
$2.00 postpaid
from:
Peterson Pub. Co.
8490 Sunset Blvd.
Los Angeles, CA 90069
or Whole Earth

When using the hammer-off technique, the hammer blow should always be on the high metal adjacent to the low spot, never anywhere else! Learning to "see" with the hand palm is part of metal work experience, and feeling to locate the low and high parts of the damage becomes a natural reaction.

The Book of Expert Driving

Techniques for safe and skillful driving by a real pro, written in a style that happily is not reminiscent of most driving instructors. Wish I'd had this to read when I was sixteen.

—JB

The Book of Expert Driving
E. D. Fales, Jr.
1970; 208pp.
$ .95 postpaid
from:
Bantam Books Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

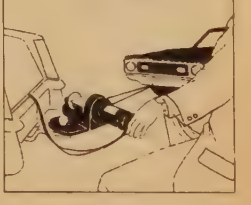
Superwinch

A winch that can pull a 3500 lb. Jeep up a 30% hill and yet weighs less than 20 lbs. and is breadloaf-size. Egad! But here they are. One model uses electric drill for power. Most use 12 volts.

—JB

Superwinch
$49 up at local dealers or direct from factory

Catalog
from:
Superwinch Inc.
Connecticut Mills Ave.
Danielson, CT 06239



NOMADICS

Roll Your Own

A joyous book of life on the road in busses and vans: How to build one, what it's like living in one, equipment, repairs, special places to go, war stories, lots of photos of machines and nice people.

—JB

Roll Your Own
Jodi Pallidini & Beverly Dubin
1974; 192pp.
$3.95 postpaid
from:
Collier Books
Macmillan Publishing Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside (Burlington Co.)
NJ 08075
or Whole Earth

In the five years we've lived in this van we've had different concepts of what it is we're doing with ourselves and the van. We prefer to have our furniture easily rearrangeable rather than built in. If you have a built-in interior you are stuck with that arrangement, while your living concepts keep on changing.

■

Catalytic Propane Heaters
Thermex Corporation
1280 Columbus Ave.
San Francisco, CA 94133

Twelve-thousand-BTU output will run fifty-five hours on a five-gallon bottle of propane. It uses less propane.

•

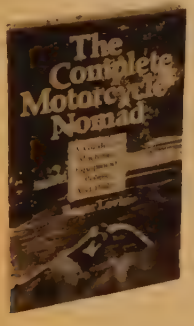
Used school buses

United School Equipment Co.
7529 Dodge St.
Omaha, NB 68114

The Complete Motorcycle Nomad

A no nonsense approach to applied two-wheeled travel, Lovin's book covers the gamut of nomadic motorcycling from choosing your bike to how to live on the road. Twenty-two chapters plus an invaluable appendix listing sources of information, fairings and outing gear, provides the critical information you need for evaluating and decision-making, plus tid-bits of wisdom (philosophical sayings) which (if you didn't get the gist of the chapter) sum it all up in a nutshell. Well-written, informative and practical.

—AP



The Complete Motorcycle Nomad
Roger Lovin
1974; 308pp.
$3.95 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154
or Whole Earth

You can fake a nut by winding some of your wire around the bolt. This will hold if it's done right, and hold well. For a nut that takes heavy strain, and which you cannot clamp your vise grips over, haul out your plumbers' hose clamps again. I once held the swing-arm axle of a Puch in place this way for 600 miles.

As a last resort, a glob of your liquid aluminum will work perfectly as a surrogate nut. But when you get home, you'll have to saw the bolt off.

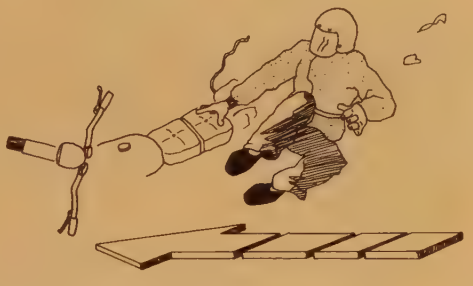
•

The most available shelter in the city, and with some practice on your part the most efficient, is not buildings at all but containers.

In the industrial portions of any city, along waterfronts, loading and unloading sections, etc., there will be any number of large packing crates and shipping containers. These range from cardboard boxes to standard-sized steel seacrates. It is among these that the nomad will find his best short-camp shelter. The advantages are that no one is likely to think of a stored or discarded box as a motel room, that these things can be found in any city, and that there is little chance that the owner will be around at two A.M. to throw you out.

•

The object, when you have to drop your bike, is to get out from under it. That's all. *Not* to try to "ride" it, not to try to aim it somewhere; not to try to salvage something besides your skin. Simply get yourself from under the bike. The reason is plain. If your leg is scooting along the pavement, you will lose skin. If it is scooting along with a few hundred pounds of bike on it, you will lose meat. All you are trying for in a high-speed drop is survival.



Dropping a bike at high speeds.

How to Restore Your Model A

The Model A Ford continues to attract a group of loyal friends, and rightly so. Here are two of the very best books on the subject, and two parts suppliers of good repute.

—JB

[Suggested by Frank L. Young III]

Model A Ford Service Bulletins Complete
Dan R. Post
320pp.
$7.00 postpaid
from:
Post Publications
Arcadia, CA 91006

How to Restore Your Model A
112 pp.
$4.00 postpaid
from:
Model A Ford Club of America
Box 2564
Pomona, CA 91766

Model A Parts

Rick Freeman
Rick's Antique Auto Parts
P.O. Box 662
Shawnee Mission
Kansas, MO 66201

Don Snyder
Snyder's Antique Auto Parts Inc.
12925 Woodworth Rd.
(Rt. 165)
New Springfield, OH 44443

Motorcycle Repair Manual

A good basic book outlining general principles and procedures. Especially encouraging to those who are afraid to do their own work. Lots of pictures, and there are specific tuning tips for the more popular models.

—JB

Motorcycle Repair Manual
Bob Green & the Editors of Motorcyclist Magazine
1973; 288pp.
$3.95 postpaid
Peterson Publishing Co.
8490 Sunset Blvd.
Los Angeles, CA 90069
or Whole Earth

Landsailing

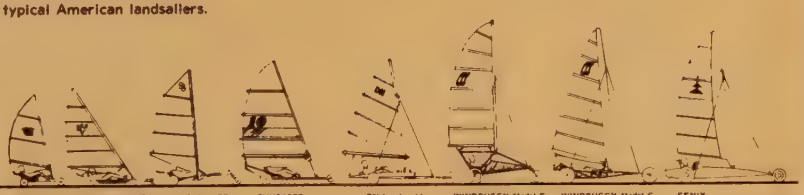
Well, it turns out you can sail on land (and, of course, ice) just like you can on water. The atmosphere, however, is a bit different and so is the machinery, and probably the attitudes too. This book shows you all about it. Includes a chapter on models.

—JB

Landsailing
George Siposs
1973; 192pp.
$4.95 postpaid
from:
Tab Books
Blue Ridge Summit
PA 17214
or Whole Earth

Under ideal conditions, a landsailer can reach speeds three times the speed of the wind. Landsailers have been clocked at over 70 mph.

Fig. 4-21. Table of typical American landsailers.



CLASS (BY NAME)	HOMKER	DESERT DART	SAND SAILER	CHUBASCO	DN Landyacht	WINDBUGGY Model F (folding)	WINDBUGGY Model C (competition)	FENIX
CLASS (BY SAIL AREA)	CLASS VII (30 sq ft or less)	CLASS VI (40 sq ft or less)	CLASS V 45 sq ft or less)	CLASS IV (55 sq ft or less)	CLASS III (79 sq ft or less)	CLASS III (75 sq ft)	CLASS II (109 sq ft)	CLASS II 109
HEIGHT (FROM GROUND)	12 feet, 6 in	13 ft 6in	16 feet	17 ft 6 in	17 ft, 6 in	22 ft	21 ft 6 inches	21 ft
WHEELBASE	3 feet	8 ft 9in	8 ft - 9 in	8 ft, 10 in	11 ft approx	8 ft, 9 in	12 ft	13 ft
WEIGHT (RIGGED)	Less than 70 lbs	185 lbs	175 lbs	290 lbs	Varies widely due to constr	120 lb	175 lb	550 lb
CONSTRUCTION MATERIAL	Aluminum tubing	Steel Tube	Steel Tube	Steel tube	Wood	Steel Tube Canvas cockpit	Steel tube Canvas cockpit	Fiber glass
COST for complete vehicle	$199 00 and up	$400 00 approx	$400 00 Approx	$839	$250 $850	NOT AVAILABLE	Not A VAILABLE	$1650
AVAILABLE FROM	Homker Landsailers Costa Mesa, Calif 92627 Plans $5 00	Nu Sport Mfg Co 5221 Rockland Eagle Rock California Plans $2 50 also parts	Nu Sport Mfg Co. 5221 Rockland Eagle Rock, California Plans $5 00 also parts & accessories	Lighthouse Landsailer Corporation Box 6873 17665 Skypark Circle Dr Irvine, California 92664 Plans & accessories available.	Plans, $5 per set NALSA Box 2283 Newport Beach, Calif 92660 Vehicles Gougeon Brothers Custom Builders 706 Martin ST Bay City, Mich 48607 Hardware William B Sarns 3810 1 Huron Pt D R Mt Clemens, Mich 48043	Windbuggy Mfg Co 419 Westminster Ave. Newport Beach, Calif. 92660 Mail contacts only Plans $20 00 Investment $250-300	Windbuggy Mfg ca. 419 Westminster Ave. Newport Beach, Calif. 92660 Mail contacts only Plans $40 Investment 400-650	Windbuggy Mfg COo 419 Westminster Ave Newport Beach, Calif 92660 Mail contacts only

HANG GLIDING

It is body-flying, the flying of dreams. You take a run off the top of a hill, climb onto the wind, and soar with the hawks. It's hazardous—— you become careful. It's hard carrying the 35 lb. wing back up the hill—— you become strong.

Learning is best to do with a skilled flier. If you've skied or surfed much you'll find the knack comes quickly. It's important to learn to assess your ability and never fly in stronger winds or tougher terrain than you can handle. You'll start on gentle open 50-100 ft. slopes.

(A note on danger. 12 hang-glider pilots were killed in 1973. 18 so far in '74—— Jan to July; mostly by stupidity—— flying with inadequate instruction or pushing the limits of a delicate stability. Some 10,000 people own wings.)

The sport is still new, with but two home-made books about it. For good basic flight instruction get:

Hang Flight
Joe Adleson &
Bill Williams
1974; 52pp.

from:
Eco-Nautics
Box 1154
Redlands, CA 92373

$3.25 postpaid

For best all-round coverage of history, design, manufacturers, etc., get:

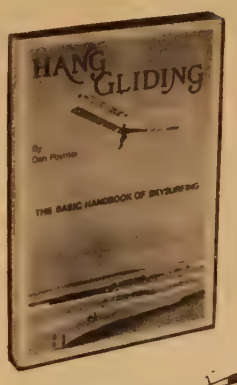
Hang Gliding
Dan Poynter
1974; 200pp

from:
Hang Gliding
48-194 Walker St.
North Quincy, MA 02171
or Whole Earth

$5.95 postpaid

As for manufacturers of the Rogallo Wing (which unrigs and transports with exceptional ease) here are the top ones, each of them offering kits and readymades. The one I know best is MANTA, which has an adjustable control bar for sitting or prone flight. Kits are $300-400, finished wings $400-600, depending on size and features. Manta runs a good school in the San Francisco Bay Area. BENNETT, somewhat expensive, has the largest sales of any manufacturer. EIPPER builds a good wing and runs a school in the Los Angeles area. ULTRALIGHT PRODUCTS has the best hardware and kits. SEAGULL is a different wing, broader in the beam, with a curved leading edge: they also have a school.

Manta staffer Eileen Previlla launches in the California Coast Range, flying swing-seat.



An Eipper-Formance drawing of the flight sequence.

Since the sport is evolving so quickly, it's worth getting the periodical **Ground Skimmer** *(includes membership in United States Hang Glider Association, $5/yr from Box 66306, Los Angeles, CA 90066).*

The present state of hang gliding reminds me of the early days of LSD.

—SB

Because the Rogallo wing was invented within NASA (for space hardware intact-return) the patent is in the public domain. Counting every garage, there are some 60 manufacturers. For safety and certain delivery I'd stick with the five below.

Quicksilver

Manta Products	Bill Bennett Delta Kites	Eipper-Formance, Inc.	Ultralight Products	Seagull Aircraft
1647 East 14 St.	Box 483	Box 246	137 Oregon St.	1554 Fifth St.
Oakland, CA 94606	Van Nuys, CA 91408	Lomita, CA 90717	El Segundo, CA 90245	Santa Monica, CA 90401

Windsurfing

Much as I love to hang glide, windsurfing surpasses even that as an on-going sport for me. More physical involvement, more weirdness that can happen without injury, less dependent on ideal weather, more ways to do it—— alone or with others. No sailing form, I believe, gets closer to Fred Neil's "bankin off of the Northeast wind, sailin on a summer breeze, SKIPPIN OVER THE OCEAN LIKE A STONE. . ."

One company makes windsurfers (we carried disclosure of the principle—— thru Government Clearinghouse—— on Pg. 130*). The design is good. The price reasonable.*

You can windsurf anywhere there's a bit of water and wind. Waves you don't need. Fancy footwork is not how you manage. Everything happens around how you hold the sail—— for experienced sailers it takes some changes to catch on because the principle is so different. Merge with the wind, or get wet again.

—SB

Windsurfer
$415.00
(FOB Marina Del Rey)

Windsurfing International Inc.
1038 Princeton Drive
Marina Del Rey, CA 90291

Standing on a 12 foot surfboard, the windsurfer holds the sail upright by grasping the Wishbone Booms and leans out against the force of the wind in the sail. By raking the mast fore and aft, he changes the center of effort thereby turning the board off the wind when raked forward or into the wind when raked aft. The board is highly maneuverable and can tack and turn more readily than an average sailboat.

•

Cliff Kolence of Palo Alto has designed and built a 20 lb. windsurfer bike trailer & says it works nicely (& saves on gas). Cost was $27 & he will be happy to send plans to anyone interested. Contact Cliff at 3591 Louis St., Palo Alto, Calif. 94303

•

So many people have shown interest in John Benson's modified daggerboard that he is now offering to make these for only $25. . . Ideal to increase control in choppy conditions & wind in the 20 knot range. Write John at 29 Thames St., Newport, R.I. 02840.

NOMADICS

The Complete Book of Sky Sports

Here's an in-depth look at parachuting, soaring, gyrocopter flying, ballooning, and private plane flying. Since Emrich wrote this in 1969, when hang-gliding wasn't what it is today, this sport isn't included. At any rate, for details on the other ones, the book is a winner. Included for each section is more than enough information to give you a foundation for good judgement in that sport, on training, techniques and procedures, equipment and costs. Many fine photographs and drawings accompany the text, plus, at the end of each section, Emrich has included further books to read, organizations to contact, and sources of gear. Really a fine book.

—AP

The Complete Book of Sky Sports
Linn Emrich
1970; 208pp.
$2.95 postpaid
from:
Macmillan Publishing Co.
Front and Brown Sts.
Riverside, NJ
08075
or Whole Earth

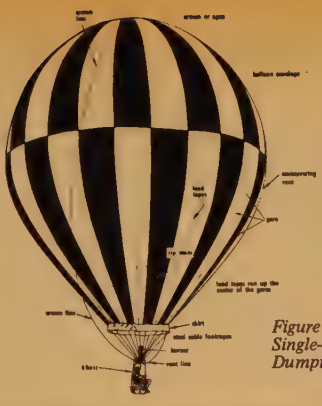


Figure 68. Semco Single-Place Dumping Balloon

Cream Rises
FLYING

Stick and Rudder *Instruction masterpiece* 296
Pilots' Weather *Cloud understanding* 647
Private Pilot Study Guide *Homework* 297
Hang Gliding *The utter rudiment* 645
Weather Flying *Sound advice* 296
The Joy of Soaring *Best gliding intro* 299
Aircraft Components *Gear* 298
Trade-a-Plane *Airplanes* 298
Jonathan Livingston Seagull *Inner flight* 387

Figure 5. Paper Doll

Cut doll from stiff paper. Bend into arched shape and drop from 6 feet high. It will always fall curved side down, or stable.

Place kink or bend in center of doll and drop again. Pattern of fall is random and tumbling. This is unstable and happens when jumper bends forward at waist during free fall.

Figure 34. Sailplane Controls and Instruments

Sport Ballooning with the Thermal Aerostat

Sport Ballooning was originally compiled as a guide for balloon club members—— so states the author; however, it is an excellent and detailed introduction to hot air flight from lift off to touch down, for anyone interested in how an aerostation is operated. Includes FAA licensing requirements, a list of ballooning clubs, and a dictionary of terms and jargon.

—AP

Sport Ballooning with the Thermal Aerostat
H. Lee Russell
1972; 68pp.
$3.00 postpaid
from:
Aerostation 3
Box 141
Long Sault, Ontario
Canada

If this is to be a "champagne flight" a bottle of suitable vintage might be lovingly protected and safely stowed aboard. The champagne, of course, is traditional balloon equippage. But it is not there to be broken open by the joyous survivors of an especially hard landing—— no matter how thankful they are. Rather, it is intended as that final touch of diplomacy, when your mollifying reassurances fail to subdue the angry farmer-with-a-shotgun on whose haystack you are sitting.

•

The cost of the personal equipment required by the aspiring member of the balloon club is almost nominal when compared to that of many other sports. All that is needed is a helmet—a snowmobile helmet at about $9.00 is adequate, a pair of dungarees (less than $12. even for a good pair) and a $1.95 pair of heavy cotton golves—— the kind with the raised ridge of padding on the back. Although not an absolute necessity, stout, calf-high boots are handy, especially when one has landed in a soggy pasture. Thus for about $23 or less an aeronaut is fully suited for any eventuality.

As for club membership, a $2500 to $3000 balloon split among 10 active members would result in a one-time expenditure of $250 to $300 each.

There are few vehicles of any kind which have a lower fuel cost than a hot-air balloon. A fifteen gallon tank fill costs approximately $3.00 and is sufficient for 2 hours of flight. At $1.50 per hour you will find the gasoline cost of most automobiles will exceed this figure.

Soaring

Dear Mr. Brand:

Thank you for taking time on the telephone last week to discuss soaring lithographs and books.

Enclosed, as promised, is a complete set of my soaring lithos, gratis. They are sold for $5 each and are available direct from me or from Rainco, Inc., Box 20944, Pheenix, Arizona 85036 (later referred to as Rainco, a major source for soaring materials).

Interesting books for you to advise your readers about:

Pilots' Weather— By Ann Welch, published by John Murray in London, available in the U.S. from Rainco. An absorbing and fully illustrated treatise on soaring meterology from the ground and the cockpit. An absolute 'must' for pilots. $12 I think (it's £4.50 in England, where I got my copy).

Fundamentals of Soaring— By Derek Piggott, due to be published this Fall by John Murray. Piggott is one of the most famous glider pilots in the world and this is the definitive pilot's text on the behaviour of airframes and how to control them.

Free as a Bird— By Philip Wills, ex World and British Soaring Champion. John Murray again (home office address is 50 Albermarle Street, London W1X 4BD), and price will be around $10 from Rainco. Outstanding review of gliding progress since WWII in Europe.

The Art and Technique of Soaring— By Richard Wolters. McGraw-Hill, $15. A fully illustrated text showing virtually every aspect of learning to fly sailplanes, mostly the Schweitzer 2-33. Available from Rainco or the Soaring Society of America, or the local bookstore if you're lucky.

On Quiet Wings— By Joseph Lincoln. $30 from Rainco or the SSA. A full anthology of gliding flight since the first time man tried to get off the ground with wings. Beautifully produced and illustrated, and featuring most of the worthwhile authors on gliding who have ever put pen to paper.

Gliding (A Handbook on Soaring Flight)— By Derek Piggott. John Murray didn't do this one; it comes from Adam and Charles Black in London, and is available from Rainco for $10. Good basic text.

New Soaring Pilot— by Ann and Lorne Welch and Frank Irving. John Murray, but available in the U.S. through Rainco for $10. An excellent introductory book on soaring up through the beginnings of competition flying.

Meteorology for Glider Pilots— By C.E. Wallington. Another John Murray book, available from Rainco for $1C approximately. This is the basic scientific text on aviation weather with emphasis on gliding. Fully illustrated and documented, but rather hard going for the layman.

Pilot's Choice— By Gren Seibels. $6.95 going up I think to $7.50. Published by Soaring Symposia, 408 Washington St., Cumberland, Maryland 21502. Utterly delightful account of a pilot who turned from noisy powered aircraft to the delights of soaring, and his many adventures. Well written, witty, delightful fun and authentic with a notable absence of 'gee whiz'.

The above is a very small sampling of current books. In the summer I'll be publishing a book consisting of the collected writings of the new World Soaring Champion, George Moffat. It'll be $5, paperback, and will probably be entitled **"Winning"**. The Soaring Press, at my office address.

There's a local gliding organization that welcomes hang glider and soaring pilots. It's PASCO, the Pacific Area Soaring Council, and annual dues are $5. Membership chairperson is Jane Herold, 966 Astoria Drive, Sunnyvale 94086. An excellent monthly publication called "West Wind" and year-round gliding activities throughout the West.

I hope I helped a little. This is just a very tiny sampling of the available materials, that include sailplane models, maps, training data, etc. The Soaring Society of America is a very good source of information, and they are always interested in helping.

Best wishes on your new venture.

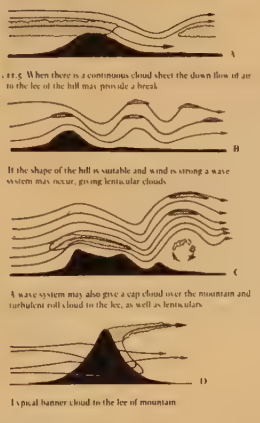
John Joss
Box 960
Los Altos, CA 9402

Pilot's Weather

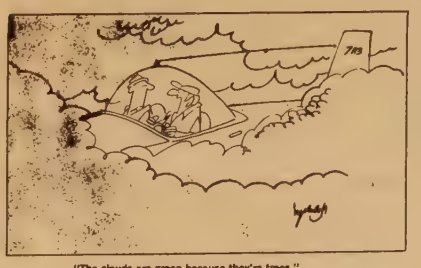
An excellent, though somewhat technical coverage of the relationship of clouds to the air masses that produce them and how they can be used to indicate the flying conditions that will be found within the air mass. Balloonists and glider pilots will probably find this book to be just the ticket. Well illustrated with black & white photographs of clouds, many accompanied by synoptic maps showing the weather patterns that produced them, plus numerous first-hand accounts by pilots of weather problems encountered in flight. Pick this one up after you've gotten a basic backround on weather and flying (ballooning or gliding)—— it's not a book for freshmen.

—AP

Ann Welch



Pilot's Weather
Ann Welch
1973; 268pp.
$4.25 postpaid
from:
Rainco, Inc.
Box 20944
Phoenix, AZ 85036
or Whole Earth



"The clouds are green because they're trees."

© Aircraft Owners' and Pilots' Association 1971

The Directory of Ballooning

A comprehensive access directory, somewhat international in scope, to everything relating to the sport. If you're at all into ballooning this handy little directory is a must!—— it's the "yellow pages" to everything else. Also includes a listing of better than 200 books on the subject and where to buy them. Mr. Russell has done a praiseworthy job.

—AP

The Directory of Ballooning
H. Lee Russell
1974; 38pp.
$3.00 postpaid
from:
Aerostation 3
Bos 141
Long Sault, Ontario
Canada

Contents

National Associations	Journals
Balloon Societies	British Manufacturers
Balloon Schools	British Clubs & Schools
Manufacturers	Museums & Libraries
Consultants	European & Irish Clubs
Insurance	Booksellers
Repair Stations	Dealers
Promotions	Accessories

Home Built Gliders

Dear Whole Earth People,

Although hang gliders have swept the scene, I'm still hooked on sailplanes (froze last winter at 28,000 feet msl—— high above the Colorado Rockies!) Soaring is truly joyful! My big dream is to build my own glider with some help from hubby and those more construction oriented than I. Here's some of the choices for home built gliders that you and the Epilog readers may be interested in.

"Duster"	plans $75, wood	Hank Thor California Sailplanes Box 679 Huntington Beach CA 92648
	kits ($1395-$2495) components (from $15)	Duster Sailplane kits 12676 Pierce no. 8 Pacoima, CA 91331
	Dust Rag (publication) $3 for 6 issues	Dust Rag 521 Rosemont St. La Jolla, CA 92037
RS15, HP16 HP17	all metal, kits $3995	Bryan Aircraft Corp. Williams County Airport Bryan, Ohio 43506
Laister CP-49 (type certified)	metal with fiber-glass kit $3900	Laister Sailplanes, Inc. 2712 Chico Ave. South El Monte CA 91733
Schweizer 1-26 (type certified)	metal, kits $4090-$5295	Schweizer Aircraft Corp. P.O. Box 147 Elmira, NY 14902
Schweizer 1-33 (type certified)	metal and fabric kits from $6735	
BG-6, BG-7, BG-12BD, BG-12/16	wood, plans only $35 to $135	Sailplane Corp. El Mirage Rt. Box 101 Adelanto, CA 92301

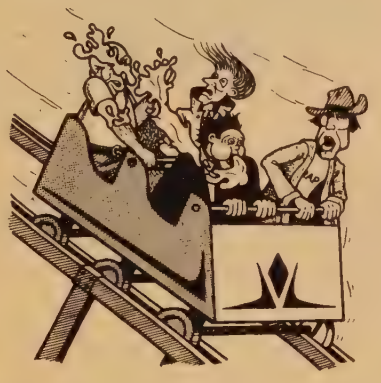
A fine magazine for aircraft homebuilders is:
Sport Aviation available from Experimental Aircraft Assn., P.O. Box 229, Hales Corners, WI 53130. Membership is $15 for a year.

And for soaring enthusiasts:
Soaring, available from Soaring Society of America, Box 66071, Los Angeles, CA 90066. Membership is $15 for a year.

Daryl Ann Kyle
Athol Idaho

14

GURU GOLLY JI GETS TAKEN FOR A RIDE



Surrounded by his official entourage, Guru Golly Ji chomps on French-fried potatoes, licks a frozen custard and gazes at himself in a distortion mirror at the amusement park that a bunch of Camp Crappers are visiting.

Tongue Fu invites him to go on the roller coaster.

"I accept," he says. "I could use a new metaphor. Life is like a roller coaster."

"Do you enjoy going on the rides here?"

"Listen, they all try to squeeze enjoyment from out of fear. But if somebody ain't afraid, then that's enjoyment also. Outasight."

As their roller coaster car ascends the tracks, Guru Golly Ji folds his arms across his chest. When everyone else screams on the descent, he maintains a peaceful facade, even on the steepest decline.

Nevertheless, he throws up. His divine vomit curves around and lands on the notepad of Columbian, who is sitting next to Sojak in the seat behind ....

Flashiebackie:

Six-year-old Golly Ji is a pupil at the Famous Gurus School.

"I don't wanna be a famous guru," he wails.

His teacher places an electronic stimulator against Golly Ji's thigh. He reels with pain. "Now behave yourself or you'll get another contingency shock."

"I'm sorry. I'm ready for today's lesson."

"All right. Now then. What is the value of nostalgia in recruiting converts?"

"To associate feelings of warmth with the famous guru."

"What is the value of ritual in recruiting converts?"

"To help set the pattern for—— ah, please, can't I just go out and play with the other kids?"

The teacher gives Golly Ji's other thigh a taste of the electronic stimulator. He reels with pain once again. "Now let's get on with your catechism. The value of sacrifice?"

"To reinforce dependence on the famous guru through the concept of cognitive dissonance ...."

On the ground again, Tongue Fu introduces Guru Golly Ji to Wormer Slickheart, the founder of Materialistic Spiritual Training, better known by its initial letters, MST.

After a snack of corn-on-the-cob and strawberry slush, the trio goes on the ferris wheel, where Slickheart addresses himself to Guru Golly Ji.

"I'm weird, you're weird. We both get rich off our followers. But there's a difference. Your followers give up all their material possessions to you. Whereas, mine have the satisfaction of giving me a healthy chunk of their cake plus continuing to eat the rest of it themselves.

"By applying the spiritual training received at my seminars— such as aggressive eye contact, for example— to sales techniques, why they can proceed to build up their income at a geometrically increasing rate. Or what's a growth movement for?"

That evening in the Camp Crap office, Captain Mediafreak and Chocolate Graham are watching the NBC Nightly News on a portable black-and-white television set.

David Brinkley is reciting his Journal:

"The dichotomy between the theory and practice of harmonious living at Camp Crap in Oregon has been further underscored with the second American Kamikaze action by an individual from there. She has been identified only by the putridly ironic name, Innocence.

"Lacking any rational motivation, she shot and killed two young black men and then took her own life, leaving a suicide note which included a reference to Better Your Exit.

"Originally, that mysterious organization had as its main precept the attack on institutions considered to be evil. But now, apparently, they have escalated their tactics to include the murder of human beings they don't even know personally, and then they have the unmitigated gall to try and convince us that such acts are committed out of hyper-sensitivity.

"The FBI has entered the case and revealed today that another detached Oriental ear was found inside the truck where the shooting took place. Supposedly the double assassination was a spiritually inspired warning against impending famine. Isaiah:58 suggests, 'Share thy bread with the hungry,' but it doesn't say anything about destroying people who merely happen to be delivering food to a supermarket.

"Reporters who ordinarily limit their professional side-taking to sports and the weather have recently been expressing their dismay publicly about this particular tragedy, but that's understandable because a great many people they've interviewed at Camp Crap seem to be so much into grasping for their own personal salvation that they remain unperturbed by the horror around them.

"Their rationalizations range from 'What can I do about it anyway?' to 'Well, that's just their karma.' One veteran of the psychedelic revolution seemed to sum it up when he complained that someone had stolen his sleeping bag on which he had painted the slogan, *Property Is Theft* .... John?"

"Thank you, David," says John Chancellor. "We'll have news about increased fighting in the mid-East that could erupt into World War Three, but first this important message."

An announcer asks: "Are you having difficulty choosing between the mouthwash you hate the taste of and the mouthwash you love the taste of? Well, now there's a revolutionary new product for the thoughtful consumer— *Yin-Yang Mouthwash* ...."

Chocolate Graham and Captain Mediafreak are busy kissing and groping each other, as they do during every commercial.

[Continued, page 661]

NOMADICS

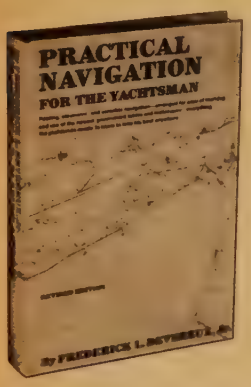
Practical Navigation for the Yachtsman

Fred Devereux, who has been a prominent horse show judge and polo player and is a former instructor in the equestrian arts at West Point, decided he was going to put together a better navigation book for the boating fraternity. Of course everyone thought he was just horsing around, but it looks like he just might have done it. Covered are both coastwise (piloting) and offshore (celestial) in an orderly and systematic manner, such that if one diligently studies the text from chapter one through chapter fifteen he can't help but become a proficient and exacting navigator. Devereux's approach is to break each chapter down into elementary techniques and each technique is so labeled with its generic term in bold print. For example, a noon sun sight, which is a favorite for determining latitude, is really a meridian transit sight, and thus it is labeled. By labeling it this way, Devereux doesn't limit the technique to just the sun. It immediately occurs to the imaginative student that stars and planets also transit the meridian and that essentially the same technique can be used with them.

One of the big bugaboos to learning a system such as navigation is jargon and process—— if you don't know the terms and how they relate to the process, how in the hell can you think and talk navigation? Devereux teaches you the grammer, and it's a cinch you'll be putting together some fine sentences when he's through with you.

One other thing—— memory tends to slip when you don't often use what you've learned. The yachtsman doesn't navigate every weekend, so he needs to be able to quickly refresh himself on certain points. Devereux has arranged his book beautifully for this.

—AP
[Suggested by Dusan Mills]



Practical Navigation for the Yachtsman
Frederick L. Devereux, Jr.
1972; 313pp.
$12.00 postpaid
from:
W.W. Norton & Co., Inc.
500 Fifth Ave.
New York, NY 10036
or Whole Earth

Cream Rises
NAVIGATION

Piloting, Seamanship and Small Boat Handling *Standard piloting and rules of the road reference* **288**

American Practical Navigator *Still the Bible* **289**

Practical Navigation for the Yachtsman *Best for learning and as a refresher* **648**

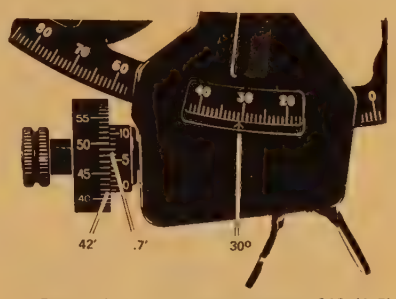
Davis Instruments *Good inexpensive* **648**

Deviation is a component of compass error created by the ship's internal magnetism, and causes the magnetic compass to deflect from magnetic north (variation deflects the compass from true north). Unlike variation, which is a constant at a given location regardless of what course the ship is following, *deviation varies with the heading of the ship.*

•

Because deviation is a function of the ship's heading, its effect must be known for all directions through 360°. The method is to determine the deviation at selected intervals (usually each 15°) and prepare a *deviation card* indicating the corrections at those intervals.

•



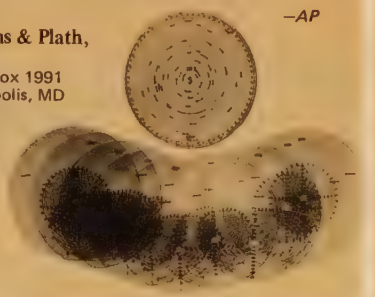
Drum micrometer sextant reading: 30° 42.7'

Weems & Plath

Probably the best known navigation supply house in the U.S., Weems handles a complete line of sextants from the Davis Mark 3 ($17) up to the Plath ($525), compasses, binoculars, chronometers, and various nav computers and plotting aids in addition to charts and books. Weems and Plath can also handle any instrument repairs you might need or periodic adjustment and cleaning. Write them first though, for a price quote and shipping info.

—AP

Weems & Plath, Inc.
P.O. Box 1991
Annapolis, MD
21404



Weems & Plath Star Finder (modern astrolabe). $13.50.

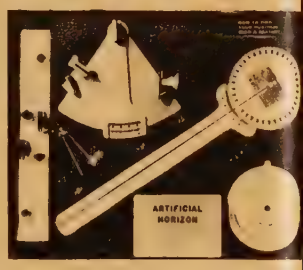
Davis Instruments

A nice line of dependable low cost navigation instruments for the boatman. The Davis Mark 3 plastic sextant ($17) has been used by many transoceanic sailors and has a good track record.

—AP

Davis Instruments Corp.
857 Thornton
San Leandro
CA 94577

Navigation Kit
A Comprehensive navigational starter
$39.95



Dive

This is one of the old line diving books which originally came out in the mid fifties when diving was first starting to catch on—— it was a good book then, and since being revised and brought up to date by Chas. Berlitz it's even better now. Covers the whole spectrum of the sport from the history of diving to the latest developments in underwater photographic gear. In between are sections on the physiological problems of diving, equipment and its use, home-built gear, spearfishing, and Scuba clubs and their activities. Well indexed, plus a good bibliography. Check it out.

—AP

Dive
Rick & Barbara Carrier
Rev. by Chas. Berlitz
1973; 285pp.
$6.95 postpaid
from:
Shipping & Service Center
Funk & Wagnalls
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

In order to keep a diving mask in top condition and prolong its life, it should be rinsed off with fresh water after each use in salt water, dried thoroughly, and sprinkled with talcum powder or hydrous silicate of magnesia. These few minutes of care for masks or any other rubber goods used in salt water will really pay, since it will prevent drying out and cracking.

•

Cream Rises
DIVING

The New Science of Skin and Scuba Diving *Standard learning book* **286**

U.S. Navy Diving Manual *Technical Reference* **286**

Dive *Good supplemental info* **648**

New England Divers *Best discount supplier* **287**

M & E Marine Supply *Most diversified inventory* **648**

The Ama, the female divers of Japan, are able to stay submerged and work for 2½ minutes at a time, under pressures of 3½ atmospheres.

•

As the Amas prepare to dive, low whistling sounds are heard across the water, all over the fishery. Whistling is done to test body response to cold. (If lips are cold, a person cannot whistle.) The Amas expel as much air as possible from the lungs, and then take a light but deep breath before submerging. The theory is that the light breath does not fatigue the respiratory muscles, and the breath can be held longer since the lungs are thoroughly ventilated and enough CO_2 is given off and enough oxygen taken in. Medical investigation revealed that the content of CO_2 in the alveolar air did not increase with the length of the dive, but rather the CO_2 accumulated in the tissues and blood, thus slowing up the absorption of oxygen by the blood and lowering the rate of consumption.

•

Fig. 49a. Visual hand signals.

M & E Marine Supply Co.

Best single-reference source of diving gear around including hard hat equipment. Handles all the major brands, though equipment is not discounted as with some of the other diving mail order outfits—— 125 page catalog, well illustrated, with good descriptions of items listed—— Cost is $1.50 and worth it. Specify the commercial diving catalog 'cause M&E also has a boating catalog.

—AP

Catalog
125pp.
$1.50
postpaid

from:
M & E Marine Supply Co.
P.O. Box 601
Camden, NJ 08101

K800 Tank
with Pack and Boot

Stock #K800B includes tank plastic boot, K valve and contour back pack - $95.9
Stock #K800C ditto except training pack 92.9

"Miserable Weather Garment"

Foam Neoprene insulation and protection against the worst kind of rainy, sleety, cold nasty weather Hood attached to jacket keeps wind and dampness away from neck and ears. Large pockets. Has the added feature of being as buoyant as a life jacket. . . Duck Hunters, Snowmobilers, Firemen, Policemen, Commercial Fishermen would find themselves much more comfortable in this new garment. Construction workers in bad weather would find it very useful.

Stock No. A500 "Miserable Weather Garment" $74.95

Sail

The best all round sailing magazine on the market—— good articles, good graphics, educational and stimulating reading just about every month. Save all your copies.

—AP

Sail Magazine
Murray L. Davis, Ed.
Monthly
$10.50/yr.
from:
Sail Magazine
Subscription
Processing Center
126 Blaine Ave.
Marion, Ohio 43302

The skillful sailors of China's junks have their own convictions: the lug is the ultimate sail now as it has been for centuries. Changes are neither expected nor wanted.

The lug's virtues are many. It is the flattest and most easily reefed or doused sail yet devised. It is economical because the strength of the battens allows a lighter weight sailcloth to be used. And, if one battened section tears, only that section needs to be replaced or patched. Even if a junkman is too poor for patches, his battens will hold the tatters together well enough for the sail to draw. Finally, a man could use the battens to climb aloft, omitting the need for ratlines.

•

After I had let go the bower anchor with plenty of chain I put out the kedge with the dinghy in the opposite direction and shotted its warp to the chain, and paid out another fathom of both so that the yacht should remain tightly moored and yet be able to swing to any direction from which the wind might blow; after that I had a chance to look about me. . . .

In the morning an onshore breeze made and I ought to have left while I could, but very soon that was not possible as the wind increased to a moderate gale, raising a short-steep sea in the entrance. Presently the wind veered a little, died away for an uncanny moment, and then the first of the squalls fell upon us. This blew not from a horizontal but from a vertical direction; it laid my little vessel over so far that her rail was under water, and, shrieking with delight, it pinned her there.

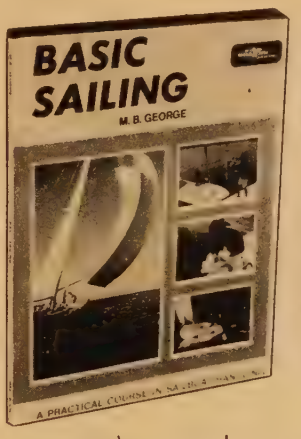
Cream Rises
SAILING

The Glenans Sailing Manual *The small-boat classic* 288
Cruising Under Sail *The Standard Text* 290
Basic Sailing *Good intro* 649
Windsurfer *Minimax sailing* 645

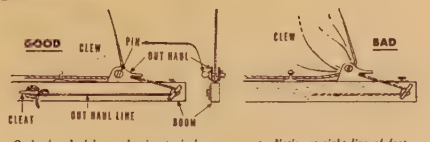
Basic Sailing

This was the best sailing instruction book for the tyro when it first came out in 1965, and it still is—— even better now that it's been revised. A bargain at twice the price, and the reason is the profusion of well-done illustrative material, particularly the line drawings and the succinct editorial presentation. Covers everything you need to know. Easy to read, easy to understand, easy to learn from. Recommended as your first purchase if you're just getting into sailing.

—AP



Basic Sailing
M.B. George
1971; Rev. Ed.,
109pp.
$2.50 postpaid
from:
Motor Boating &
Sailing Books
Hearst Books
P.O. Box 2316
FDR Station
New York, NY
10022
or Whole Earth



Outhaul end of boom showing typical arrangements. Notice straight line of foot rope and sail to outhaul. The clew here is free from wrinkles. Compare with neighboring drawing (BAD); there outhaul is not of proper size or in proper position. A bend in the sail and bolt rope occurs, causing wrinkles at the clew.

Sea Sense

A very good collection of tid-bit type information on boats, designs, surveying, construction, safety equipment, emergency maneuvers (capsizing, running aground, fire, etc) weather, storm seamanship and heavy weather rigs that it would take the average sailor years of sailing on many different boats in a variety of situations to accumulate. The emphasis is on knowing what to look for or prethinking a potential situation to avoid trouble. There is a lot of good information in the book, and by the same token a lot of good info that should be there is missing. For example, after searching through the index, "Working Aloft," "Injuries from Lines," and "Running Rigging and Related Fittings," I wasn't able to find word one on inspecting rope (manila, cotton, nylon, etc.) for wear, and damage—— and Jack, rope ain't no minor detail on a sailing vessel!

Wait for a reprint edition by Crown Publishers, then pick it up for $4.95—— Damn good book!

—AP

Sea Sense
Richard Henderson
1972; 307pp.
$12.50 postpaid
from:
International Marine
Pub., Inc.
21 Elm
Camden, ME 04843
or Whole Earth

Before giving a new or used boat a detailed examination, the prospective buyer should give her a general, over-all, sizing-up. He should observe her lines, rig, cabin house, accommodations, cockpit, bright work, general appearance, state of upkeep, condition of equipment, and so forth. He should observe the fairness of her topsides, and look at her trim to see if she is listed or floating down by the head or stern. If she is a fairly small boat, the prospective buyer should notice how much she heels when he steps aboard at her rail, for this will give some small indication of her stability. It is a good idea to bounce up and down on one's feet while walking across the deck to test its sturdiness. Of course, all deck gear and mechanical devices should be looked over, although later all mechanical and electronic equipment should be carefully examined by a surveyor or marine technician. Particular notice should be taken of the joiner work, as this is indicative of the degree of care taken in the boat's entire construction. As designer-sailmaker Ted Hood has said, "The things you can see are an indication of the things you can't see."

NOMADICS

SAIL TRAINING OPPORTUNITIES

by Mary Crowley

The ocean is a superb place for learning. By virtue of the limits of a 'ship island' a sense of community and the knowledge of how to work within a group and get along with people are fostered. A shipboard environment makes each person aware of the need for sharing and participation. The combination of the special qualities of life at sea and the challenge of the ocean itself, gives questing people a matchless learning and community living experience. Some schoolship programs emphasise sail training and marine traditions while others maintain more of a traditional academic structure. There is some emphasis on the experience of sailing to various countries and cultures. Below is a list of some schoolship opportunities. Currently I am looking into these ventures and further details and comments such as prices, dates and quality of programs will be available. The quality of schoolship programs does vary depending naturally on current administration, crew and staff. Please do not consider the list below a recommendation but rather just a source of reference. After further inquiry I will be happy to pass on more details about the programs which offer the best seafaring and educational experiences. I would also be interested in receiving detailed information from any programs not included in this list.

Refer any correspondence to Mary Crowley, 1709 Bridgeway, Sausalito, California 94965.

UNITED STATES ORGANIZATIONS:

OCEANIC SOCIETY, Bldg. 240, Fort Mason, San Francisco, CA 94123, Phone: 415-441-5970.

O.S. is currently working with 4 vessels involved in educational programming and expeditions. The TARA is operating in Australia and Melanesia; the MOONWIND in Belize, British Honduras; the MARABELL in British Columbia; and NEW WORLD in the Hawaiian Islands. Our program will be expanding in 1975 to include other sailing and schoolship opportunities. The Oceanic Society is interested in helping other organizations further schoolship programs and at present is acting as a clearing house for information in this field.

AMERICAN SAILING EDUCATION ASSOCIATION
3 School St., Boston, MA 02108

S.E.A. operates the 100 ft. auxiliary schooner WESTWARD in cooperation with Boston University. They jointly sponsor 5 annual courses of academic and practical instruction in seamanship, navigation, marine sciences and environmental monitoring. Accommodates 20 apprentices from the age of 16 and up.

THE OCEANICS SCHOOL OF NEW YORK
145 E. 74th St., New York, NY 10021

The Oceanics operates two 5 month sessions beginning September 9, 1974 and February 5, 1975. Accommodations for 90 - 100 students in each academic term on board the 316 ft. 3 masted bark STATSRAAD LEMKHUL. In addition to regular academic courses, there are sail training programs and exploration of the cultures and countries visited.

TABOR ACADEMY
Marion, MA 02738

The Tabor Academy operates a sail training program as part of their regular curriculum. Students experience their initiation to sailing on one of the 2 smaller cruising sailboats and advance to the 92' schooner TABOR BOY. Oceanographic program in association with Woods Hole.

AMERICAN SAIL TRAINING ASSOCIATION (ASTA)
Banister's Wharf, Newport, R.I. 02840

ASTA is associated with England's Sail Training Association and helps fill current ships—— BILL OF RIGHTS, SHENENDOAH, ETC. with students.

THE FLINT SCHOOL
7734 South Tamiami Trail
Sarasota, FL 33581

CANADA

TORONTO BRIGANTINE ASSOCIATION,
P.O. Box 1035, Toronto, Ontario, Canada.

The Toronto Brigantine Association pursue their motto "building character through adventure" by providing opportunity for sail training to students aboard their 60' brigantine PATHFINDER.

UNITED KINGDOM

SAIL TRAINING ASSOCIATION OF ENGLAND
The STA Schooners, Bosham, Chichester, Sussex, ENGLAND

The STA operates the schooners SIR WINSTON CHURCHILL and MALCOLM MILLER on 1, 2 and 3 week sail training courses for young people. Trainees must be at least 16 and under 21. There are also a few adult courses available. These trips operate year round.

OCEAN YOUTH CLUB
1 Oak St., Gosport, Hampshire, ENGLAND

OYC provides sailing experiences for young people on a variety of vessels.

YOUNG MARINERS INTERNATIONAL
58 Woodville Road
New Barnet, Herts, ENGLAND

YMI is a volunteer and enthusiastic international organization of people who deeply believe in sail training and square riggers, and whose aim is to provide both youth and adults with the opportunity to participate in the running of the world's great square rigged ships.

NEW ZEALAND

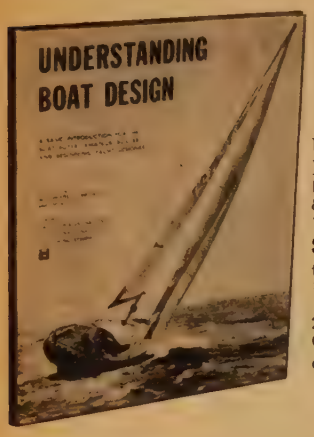
SPIRIT OF ADVENTURE
C.P.O. Box 4071
Auckland, New Zealand

SPIRIT OF ADVENTURE is a 90 ft. auxiliary ketch that accommodates 30 students on 12 day adventure and study cruises. Program includes instruction in seamanship, navigation, engineering, marine biology and allied subjects. Program open primarily to secondary school students but activities may be planned for other age groups.

Understanding Boat Design

The best book going for the layman on practical naval architecture and boat design. All the important principles, aspects and considerations are covered in easy to understand language, with examples and illustrations used wherever abstract ideas are presented. Read this one (and it can be done in an afternoon) and you'll have a helluva lot better idea of what a boat is all about. Very highly recommended as a reference.

–AP



Understanding Boat Design
Edward S. Brewer, N.A. & Jim Betts
1971; 66pp.
$3.95 postpaid
from:
International Marine Publishing Co.
21 Elm St.
Camden, ME 04843
or Whole Earth

All hull types are divided into three general categories according to their speed-length ratio. This term is another non-dimensional figure, obtained by dividing the boat's speed in knots by the square root of its LWL. Thus a 25' WL motorboat with a top speed of 12 knots would have a speed-length of 2.4, and an ocean liner, on a WL of perhaps 1000 feet, doing 28 knots, would have a speed-length ratio of .885.

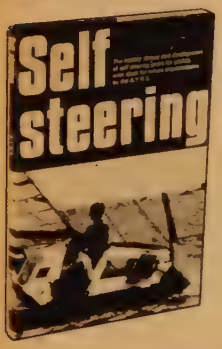
Displacement hulls, like the ocean liner, are those obtaining no lift from their speed. The maximum S/L ratio of a true displacement hull is 1.34 after which speed, despite added power, she just digs her stern in and goes no faster. Typical displacement hulls are rowboats, canoes, trawler type vessels and normal cruising sailboats.

(For example, a sailboat with a WL length of 25 ft, will go 1.34 times the square root of 25 [or 5] which is 6.7 knots or about seven and a half miles per hour. This is "hull speed" and adding more sail or power will just strain the boat and her equipment.)

Self Steering

Describes and analyzes some 25 to 30 different self steering systems which will keep a sailboat on her course with respect to the "apparent wind." The principles of design are given, as are good points and faults of each system as far as they are known. Another gem for the deep water sailor from AYRS. Damn book isn't indexed, though!

–AP



Self Steering
Amateur Yacht Research Society
1974; 3rd Ed.; 168pp.
$5.00 postpaid
from:
Amateur Yacht Research Society
375 Sylvan Ave.
Englewood Cliffs, NJ 07632
or Whole Earth

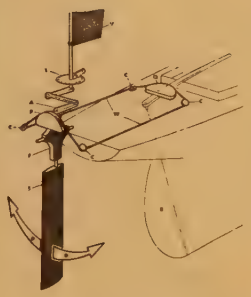


Fig. 2 Working of Hasler Pendulum gear.

Self steering gears are now able to *sail* a yacht to windward rather than merely *steer* her on a general course. In other words the degree of control is sufficiently rapid and accurate to reduce the variations of the apparent wind angle to the minimum and to avoid oversteering. Comparative tests of a vane gear against a skilled helmsman, by means of the multipen chart recording equipment showed that the vane (a Quartermaster fitted to a 5-ton Cruiser) was sailing the yacht better than the helmsman, producing higher pointing, a lower average angle of heel and resulting in a better speed made good to windward.

Clinker Boatbuilding

An excellent first project. Use straight boards to make a curved hull for your small boat. A thorough nicely made book.

–SB

Clinker Boatbuilding
John Leather
1973; 208pp.
$8.95 postpaid
from:
International Marine Publishing Company
21 Elm St.
Camden, MA 04843
or Whole Earth

11 Square section nail ragged for improved holding

12 Turning a nail

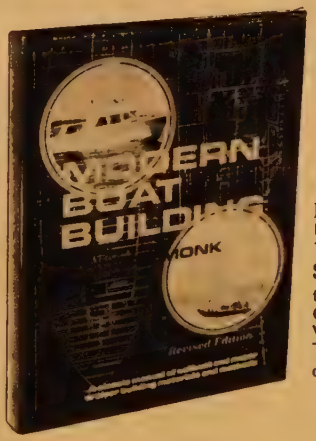
In contrast to the centuries-old clinker boatbuilding tradition, cold-moulding is the latest serious development in wooden boatbuilding, enabling the professional or amateur to mould craft of the most intricate shape and superb finish, simply and economically, from layers of thin timber bonded by waterproof adhesives.

Cold moulding has been used to build the finest yachts and the smallest dinghies equally well. For lightness with strength it is unequalled, and gives pleasure in creating a hull which has the traditional feel of wood combined with the ability to be stored out of the water or in the sun and wind for long periods without opening up.

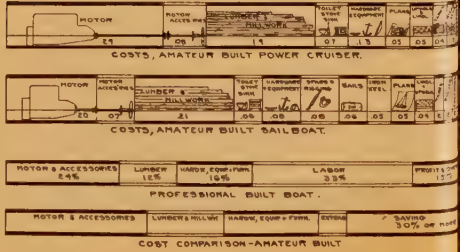
Modern Boat Building

Edwin Monk is one of the old line naval architects who's got many years of experience under his belt on boat designing and building. The book, though homing in on wood hull construction, does cover important data relating to aluminum, steel, fiberglass and ferro cement hulls. Compared to Chapelle's **Boatbuilding**, *Monk's book seems easier to use from the standpoint of grasping principles and procedures–– probably because of the large illustrations, of which there are many, and the nice tables and graphs. His style is a little more personal and direct, though the information is not quite as detailed as with Chapelle. This is not necessarily a setback. Monk just gets to the point and covers the everyday techniques you should know how to do well, and avoids digressing into the variations or unique methods that you may only find useful as an alternative once or twice during the whole project. At the price, the book can only be recommended if you're into wooden boats; other hull materials are not discussed in sufficient detail from a construction standpoint or comparatively to merit plunkin down $12.50.*

–AP



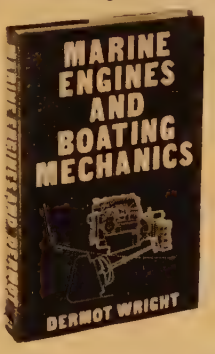
Modern Boat Building
Edwin Monk
1973, rev. ed.; 179pp.
$12.50 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth



Cream Rises
BOAT BUILDING

Boatbuilding *Classic on wooden construction* **292**
Ferro-Cement *Outstanding* **651**
Self Steering *History, theory and development* **650**
Understanding Boat Design *Best design intro* **650**
National Fisherman *Latest news* **291**

Marine Engines and Boating Mechanics



Marine Engines & Boating Mechanics
Dermont Wright
1973; 245pp.
$12.50 postpaid
from:
David and Charles
North Pomfret, VT 05053
or Whole Earth

A clearly written and simple, but detailed coverage of how marine engines (petrol and paraffin) and their associated drive trains, electrical systems, and so forth operate with observations on what happens when things aren't function properly. One interesting aspect of Wright's commentary is that he includes a lot of numbers (with the formulas to work them), which gives the reader a more realistic idea of how things relate to each other. For example, with respect to cranking an engine to start it he states, "A petrol engine requires about 1/100 part of its power and a diesel, because of the much higher compression, nearer 1/30." You'll know a lot more about marine mechanics after reading this one, but have a good imagination, because its almost straight text.

–AP

Lehman Auto Engine Conversion

Got an old Ford V-8 (or other standard car engine) you've been thinking about sticking in a boat? Lehman's got all the gear you'll need to do it with their ECON-O-POWER conversion kits. An amateur mechanic without any specialized shop tools can convert a car or truck engine into one suitable for marine use in about 4-5 hours. 66-page catalog.

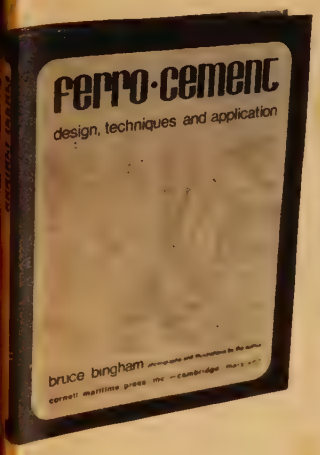
–AP

Lehman Mfg. Co., Inc.
800 E. Elizabeth Ave.
Linden, NJ 07036

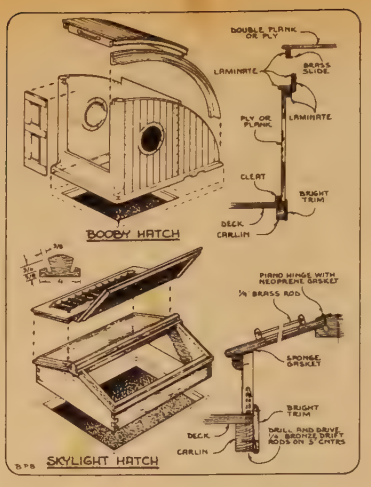
Ferro-Cement

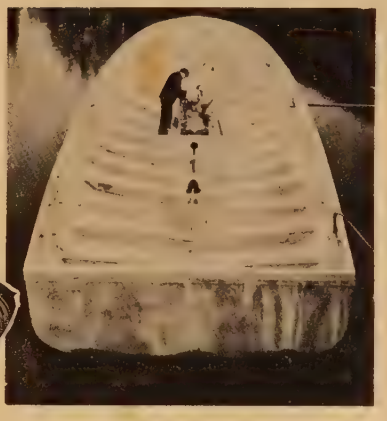
This is it!!! If you've finally decided to get serious about building your own ferro-cement boat this is the book to buy. As a matter of fact, it's an excellent book on the theory and practice of naval architecture, and boatbuilding. (I'd have purchased it on that alone). The book is fat and heavy with detailed information and profusely illustrated with some of the finest technical and perspective drawings you come along in some time, plus many, many, excellent close-up photographs—— you don't miss a trick. Forget all the other books, Bingham's got em beat by two leagues—— information-wise, illustration-wise, how to plan it and do it-wise—— all the way. Amen.

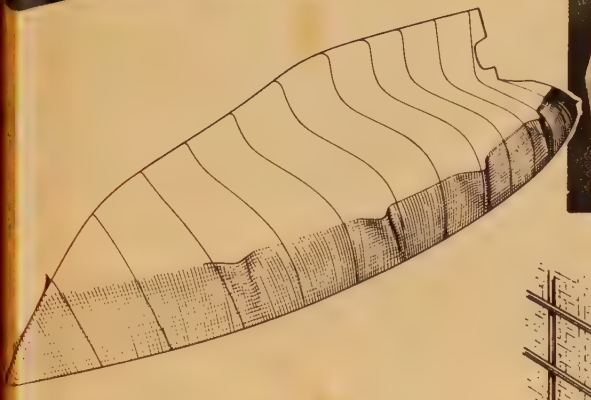
—AP



Ferro-Cement
Design, Techniques & Application
Bruce Bingham
1974; 444pp.
$17.50 postpaid
from:
Cornell Maritime Press, Inc.
Box 109
Cambridge, MD 21613
or Whole Earth

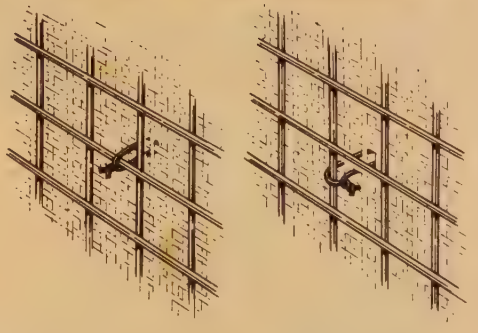






After stretching or rolling the mesh panel onto the hull, smooth the mesh wrinkles toward each other, stapling as you go.

Lofting, or laying down, is the process of scaling the architect's Lines Drawing to full size. Throughout this procedure, ultimate accuracy must be sought and absolute fairness achieved (if such is really possible.). . . Lofting has the effect of developing the train of analytical thought by requiring consideration of building procedure and sequence. . . . Often, an additional hour on the lofting floor eliminates many days of backbreaking handwork on the vessel. For this reason alone, short-cutting this vital ritual is hardly worthwhile.

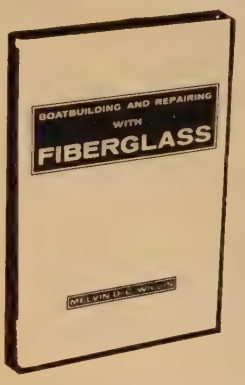


An improper wire tie may interfere with successive mesh panels, thus increasing thickness (left). The proper wire tie (right) is wound to the lower mesh wire and is turned back to avoid inadvertent bumps.

Boatbuilding and Repairing With Fiberglass

Basic coverage of tools and compounds and processes. The book was originally published as the text for several 10-week fiberglass technique courses given for the International Amateur Boatbuilding Society. The easy to understand text, well executed construction diagrams and lists of sources (names and addresses) for tools and compounds would make this a worthwhile addition to the amateur boatbuilders library.

—AP



Boatbuilding and Repairing with Fiberglass
Melvin D.C. Willis
1972; 178pp.
$9.95 postpaid
from:
International Marine Pub. Inc.
21 Elm St.
Camden, ME 04843
or Whole Earth

When the matt cloth is wet, but not in complete contact with the gel coat, it will appear white or whitish. But when you push the wet matt hard against the gel coat, the color of the gel coat will show through the matt. If the gel coat is black, the matt will appear a very dark gray. Now perhaps you can see the reason for spraying black gel coat over the white gel coat: if you put the matt over white gel coat, you could not tell by a change in color when the matt was in contact with the gel coat.

Stiles Boat Supply

Materials for the fiberglass boat builder—— resin, solvents, cloth, color pigments, mixing gear, and sideline stuff like sandpaper, disc sanders, rollers, wood screws, plywood and glue. Nice little catalog.

—AP

Stiles Boat Supply
Box 11
Linden Ave.
Mantua Hts., NJ 08051

Pansy Cabin Heater

The "Pansy" produced by Pascal Atkey & Son Ltd. is superior to all other cabin heaters I have experienced. It burns charcoal and, unlike the kerosene heaters often found aboard, has a dehumidifying effect. The Pansy has kept our Tahiti ketch warm and dry during the coldest, foggiest, and rainiest weather the Pacific Coast has to offer. The primary advantages of the Pansy are:

The lid can be dogged down so that fire or sparks cannot escape under any conditions.

The Charlie Noble is very small so that there is no worry of getting much water down below—— there is also less on deck to stumble over.

The heater is made of heavy gauge stainless steel so there is no problem with rust or corrosion.

The flu pipe's interior diameter is no more than 3/4 of an inch. This prevents a great loss of heat and makes fuel consumption very low.

—Kathleen Pumphrey

The price is currently about $189. Price is subject to change. The 'Pansy' cabin heater is available through:

International Yacht Supplies Unlimited
P.O. Box 852
Sausalito, CA 94965

Pascall Atkey & Son, Ltd.
29 & 30 High Street
Cowes, I.W.
England

Construction: Stainless steel with chromed fitments. Asbestos lined. Complete with 2 ft. of above and below deck pipe, and flanges.

Heat output: Minimum 3,000 BTUs/hour, or 3/4 Kw. Burning time, on low fire, about eight hours.

Dimensions. Height 0/1 18-1/2". Diameter of heater body 7". Projection o/a 20-1/2". Complete weight 18 pounds.

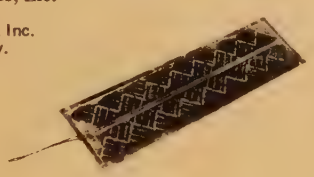
Zurn Solar Charger

Here's a little Solar Energizer which can be used to keep your batteries up with a trickle charge all day (if it isn't cloudy).

—AP

Zurn Industries, Inc.

Zurn Industries, Inc.
3533 Perry Hwy.
Erie, PA 16509



Specifications

Model No.	SE203	SE250
Size (Nominal)	3-1/2" x 13" x 1/4"	9-1/4" x 18" x 1/4"
Volts	Sufficient to charge a 12v battery	
Amps	In full sun, (min.) 0.12	.5
Peak Watts (approx)	1.5	6
Watt/hour/week (approx)	36	180
Weight	3 oz.	1.2 lb.
Price	$110	$430

C-Flex Fiberglass Planking

This material consists of small, flexible rods of fiberglass held together in strips by woven softer strands. The result is a "plank" a foot wide and any length you need, that can be bent over a ribbed frame, and then resined. You get a fiberglass boat without having to make a mold! The stuff easily accepts compound curves, and obviously could be used for objects other than boats: streamlined camper trucks, domes, and custom-shaped hot water storage tanks for solar heating systems, for instance. It works; it's been proven in racing yachts. I see many good possibilities for its use.

—JB

C-Flex
75¢ - 84¢/sq. ft.

Information:
Seeman Plastics Inc.
P.O. Box 51647
New Orleans, LA 70151

NOMADICS

NOMADICS

The Mariners Catalog

An interesting and fun catalog of useful items and publications for those who go down at sea. . . er to the sea. Sections include Commercial Fishing, Boat Types, Boat Design, Wood, Fastners, Tools, Winches and Hoists, Boatbuilding, Models and Modeling, Marine Engines, Ship Fittings, Sails, Navigation, Weather, Clothing and Comfort, At Sea, and Stoves and Heaters. Each section contains an article or two discussing some aspect of the subject of the section. A good start on a book that should become a useful tool for boating enthusiasts, with these two exceptions: it's not of the same high quality as the usual International Marine publication and, though the editor readily admits that a majority of the books listed are sold by and can be ordered through International Marine, he also states, ". . .all books in print are available through your favorite book store or favorite publisher." But yet no address is given for the publisher, whereas there are addresses for equipment catalogs, magazines and periodicals and other items not handled by International Marine. Hmmm—— funny thing?

—AP

The Mariners Catalog
Ed. David Getchell
1973; 192pp.
$4.95 postpaid
from:
The Mariner's Catalog
Camden, ME 04843

Maine Boat Builders
and Repairers Association
Frederic L. Felton
Executive Secretary
Cumberland Foreside,
Portland, Me. 04110

Good Maine Yards

Are you looking for a small, skilled yard to build you a fine wood yacht, a fishing craft, an aluminum racer, a fiberglass cruiser or sailboat or some other custom-designed boat? Such yards still exist, and in considerable number, along the coast of Maine, and the steady parade of new boats heading south each year testifies to the fact that not all the boats come from the same mold. Instant information about some of these yards—— their facilities, capacities, personnel, location, etc.—— is available from the Maine Boat Builders And Repairers Association. Their brochure lists nearly 50 yards and related facilities.

—DRG

•

"Small Craft Conversion" by John Lewis.
Adlard Coles, London, England,
1972, 288 pages, illustrated, glossary,
index, $15.

John Lewis was bitten with the conversion bug and this book is the result of his experiences and research. There's plenty of general information on the hows and whys, but the strength of the book is the specific examples, like lifeboats, whaleboats, punts and workboats. For instance, there are 31 pages on transforming a 26' lifeboat to a ketch-rigged cruiser. Lewis has specifics on installing engines, sail rigs, centerboards, leeboards, cabins, accommodations, wheelhouses and more. He even discusses how to give a straight-stem lifeboat a raked stem by adding a false bow.

•

Blacksmithing tools are offered by the following firms in the U.S.:

The Bicknell Mfg. Co.
Rockland, Me. 04841
or
Elberton, GA 30635

The Buffalo Forge Company
P.O. Box 985
Buffalo, NY 14240

•

Shipmate Stove Div.
Richman Ring Co.
Souderton, Pa.

Other quality marine stove manufacturers must wince when they hear the name Shipmate. It is a standard in the field and everyone in this part of Maine who doesn't have one, wants one. It's one of those cases where a trade name has become the generic name for the product. Even though you're drinking "UN——," you're still on a "Coke*-date." Shipmates are made for all purposes, in all sizes and finishes for all fuels. They are excellent.

The Wonderful World of Houseboating

Supplies the would-be houseboater with the information and instruction he'll need to rent a houseboat, or purchase one for a floating home. Newcomb describes the many types available and how to furnish, accessorize and navigate them. He explains how to rent a houseboat and includes a list of rental agencies, how to plan a trip and what to bring along, and so forth. A useful feature of this heavily illustrated book is a special map section with seven regional maps that show at a glance where houseboating may be done in the U.S., and 21 detailed maps zero in on some of the "hot spots" around the country. All in all a very good source of information for houseboating types.

—AP

The Wonderful World of Houseboating
Duane Newcomb
1974; 204pp.
$9.95 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ
07632
or Whole Earth

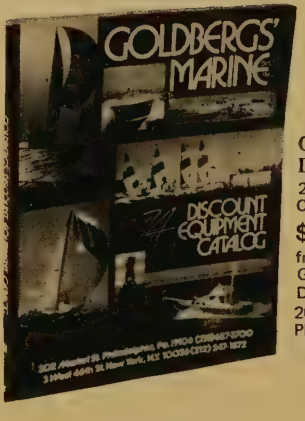
In buying a houseboat, as in renting one, your primary consideration should be *how you intend to use it.* If you want a getaway family boat for leisurely weekend cruising, stick to the pontoon models. Several manufacturers produce this kind of craft, with prices ranging from $4500 to $13,000, and lengths from 18 to 50 feet. All models are powered by outboard motors and can do from 6 to 12 miles per hour. Interiors are pleasantly comfortable.

Should you prefer something that can handle long cruises with ease, really moves and looks more like a conventional boat, consider the cruiser hulls. Conventional hull types come in steel, aluminum and fiberglass. They are powered by single- or twin-engine inboards and reach speeds of over 30 mph. Prices range from $6995 to over $50,000, and sizes from 30 to 59 feet. Numerous livability features and a wide variety of interior designs are available, with a trend toward sleeker exteriors.

Goldberg's Marine Dist. Inc.

One of the best sources of discount marine equipment and hardware on the East Coast. Catalog (203 pages) runs $1.50 but worth it for the savings you can realize on name brand gear.

—AP



Goldberg's Marine Dist. Inc.
203pp.
Catalog
$1.50 postpaid
from:
Goldberg's Marine
Dist. Inc.
202 Market St.
Philadelphia, PA 19106

A.—SAMSON YACHT BRAID
Braided polyester cover over braided polypropylene core with patented Samson parallel fiber 2-in-1 construction.
• For Sheets • Halyards • Running Rigging • Spliceable • Extremely flexible, so it will run easily through blocks without kinking.

SIZE	Mfg. List Per Foot	PRICE PER FT.	APPROX TENSILE STRENGTH	SHIP. WT. PER 100 FT.
¼"	13¢	10¢	1,700 lbs.	3 lbs.
5/16"	17¢	13¢	2,600 lbs.	5 lbs.
⅜	24¢	18¢	3,500 lbs.	6 lbs.
7/16"	38¢	23¢	5,100 lbs.	7 lbs.
½"	40¢	30¢	6,800 lbs.	9 lbs.
⅝"	66¢	53¢	11,000 lbs.	13 lbs.
¾"	.88¢	65¢	15,000 lbs.	19 lbs.

The Telltale Compass

Jorgensen's four-page newsletter tells all with no holds barred—— the inside poop on the boating industry. Who's screwing up, who's doing a good job. Definitely worthwhile information if you can afford the $20 tab.

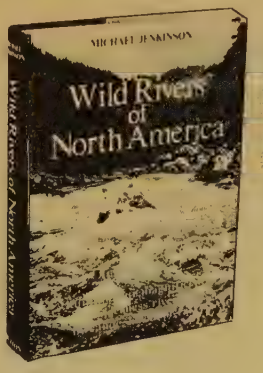
—AP
[Suggested by Stanley Shans]

The Telltale Compass
Victor Jorgensen, Ed.
$20.00/yr.
from:
The Telltale Compass
18418 South Old River Dr.
Lake Oswego, OR 97034

Wild Rivers of North America
Introduction to Water Trails in America

Two basic guidebooks for those who want to try anything from innertubes to kayaks to get away from the overly used foot trails.

Jenkinson's book is more for the experienced than the novice, covering the big rivers—— Rogue, Salmon, Colorado, Suwannee, Yukon, and Rio Grande—— in detail, and giving shorter listings for over 100 more wild rivers from Central America to the Far North. Covers history, descriptions, difficulty, recommended crafts, access points, and camping and fishing information.

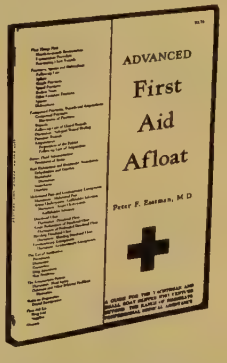


Wild Rivers of North America
Michael Jenkinson
1973; 413pp.
$12.95 postpaid
from:
E.P. Dutton & Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth

Advanced First Aid Afloat

One must have an incentive. Dry as dust text gives you none. Eastman does. He gives you cases at the beginning of each series of techniques. Cases related with horrible picture words that make you feel the drastic emergency of the situation, the terrible pain and discomfort of the injured—— "What can I do, what can I do?" Now, you're tuned up to learn. And Eastman makes it easy through his clear cut systematic procedure. At the end of the line the patient is resting comfortably well on his way to recovery and your vicarious trauma has been soothed—— and suprisingly enough, with very little effort you have remembered what to do in such a case and why. Great book!

—AP



Advanced First Aid Afloat
Peter F. Eastman, M.D.
1972; 115pp.
$3.75 postpaid
from:
Cornell Maritime Press
Box 109
Cambridge, MD 21613
or Whole Earth

Your cruising ketch is four days out of Los Angeles Harbor toward Diamond Head. At 0700 hours a sleepy helmsman invites an unintentional jibe. The boom flies across and thumps the man on watch. He slumps to the deck between the cabin trunk and the portside chain plates, unconscious and bleeding furiously from a cut head.

What do you do next, Skipper?. . .

Any major accident anywhere, ashore or afloat, daytime or nighttime, demands attention to three basic priorities.

These are:

1. Restore breathing. Time is important since man suffers severe brain damage after five minutes of apnea (non-breathing).
2. Get the victim out of further danger.
3. Stop serious bleeding.

Simple, isn't it, when considered in this way? Get to your injured crewman quickly. One glance assures you he is in no further danger where he is. Do not move him. It is obvious he is bleeding; ignore that for the moment. Man can often bleed quite a while without much danger.

Note that his chest is not moving in and out; his lips, fingertips and cheeks are blue-gray. He isn't breathing.

Start mouth-to-mouth resuscitation at once .

Detail a sturdy fellow to stop the bleeding head. Tell him what to do between breaths as you keep up the mouth-to-mouth resuscitation.

Forget about bleeding points, pressure points and such detailed anatomy. Tell him to press down hard on whatever is bleeding. If one finger will serve—— fine; if the wound is larger, he may need a whole hand. If it is bigger than that, have him stuff a guaze bandage, towel (preferably clean), or whatever is handy, into the wound and apply the pressure over this.

Colwell's book is an excellent guide for the beginner. Following a "how to go about it" section, he lists rivers and trip outlines by state. Many of the rivers listed are smooth water, rather than rapids. One of the best features is an index by all cities in the U.S. of over 100,000 population, listing rivers within a 3-hour drive, or 125-mile radius. Colwell also includes a number of detailed maps.

Both books have useful appendixes listing canoeing and kayaking organizations, outfitters, and additional sources of river running information.

—Nancy Lane

Introduction to Water Trails in America
Robert Colwell
1973; 221pp.
$2.95 postpaid
from:
Stackpole Books
Cameron and Kelker Sts.
Harrisburg, PA 17105
or Whole Earth

Major Powell called the new gorge Marble Canyon. It quickly deepened and there were many rapids. Powell and his brother climbed the canyon walls to view an eclipse of the sun, but clouds covered the sky. During a storm, they lost their way in the dusk and were forced to spend a wet and miserable night on a high ledge. The next day the expedition reached Red Wall Cavern, an overhang carved by the river on the outside of a bend. Powell speculated that if used as a theater, the vast interior should hold fifty thousand people. "Objection," he wryly added, "might be raised. . . for at high water the floor is covered with a raging flood."

August 5.— With some feeling of anxiety we enter a new canyon this morning. We have learned to observe closely the texture of the rock. In softer strata we have a quiet river, in harder we find rapids and falls. Below us are the limestones and hard sandstones which we found in Cataract Canyon. This bodes toil and danger.

August 9.— The river turns sharply to the east and seems inclosed by a wall set with a million brilliant gems. What can it mean? Every eye is engaged, every one wonders. On coming nearer we find fountains bursting from the rock high overhead, and the spray in the sunshine forms the gems which bedeck the wall. The rocks below the fountain are covered with mosses and ferns and many beautiful flowering plants. We name it Vasey's Paradise, in honor of the botanist who traveled with us last year.

•

In CONNECTICUT the canoeist might consider trips on the *Still River* and down the *Housatonic*, the *Scantic River* to

the *Connecticut* above Windsor, the *Shetucket River*, and the *Quinebaug* above Norwich, all Difficulty I or less with the usual dam portages.

The *Connecticut River* is flat water canoeing through Massachusetts and Connecticut, though not considered as scenic as in Vermont and New Hampshire.

In Connecticut and Massachusetts there are many fine tidewater streams along the coast. Tides can be a problem here, and much the same conditions exist in New Hampshire.

NOMADICS

You will be too busy to tell him this, but you know that arterial blood pressure is rarely higher than 200 mms of Mercury; even a child can press harder than that. Direct pressure is what surgeons use in the operating room to stop bleeding.

Have him watch the blood ooze between his fingers. It slows down before it stops. Keep the pressure on ten minutes longer, then have a third crewman (who has gotten out the first-aid kit) put a tight bandage around the cut head. Chances are pretty good by this time (ten minutes after you began mouth-to-mouth and five minutes after your helper had bandaged the head) that your victim is breathing on his own.

He is "coming to"; dazed but conscious. Left unattended and apneic (not breathing) while his head was bandaged, he might never have made it. But he has, thanks to your skill and knowledge.

Now you have leisure to plan. You surely won't leave him lying there on the deck. Why not get him below to his bunk? There may be other injuries that passed unnoted in the rush to revive him. Sailors are a sturdy breed. He may insist, "I'm all right now," and try to get to his feet unaided.

Assert your authority— make him stay put. It is most embarrassing, and occurs in hospitals all the time, to overlook the injuries other than the obvious ones that attracted your attention at the time of the accident. The results of such neglect may be disastrous.

You must know how badly he is hurt. Has he hidden injury? How far away is medical help? Will you need such help, or can you handle this yourself?

We will assume he had a complete physical checkup by his physician before departure. Therefore, he has no chronic diseases that he and you do not know about.

To examine him:

1. Start at the top. He is conscious, so ask him where it hurts. His head is pretty well covered by the bandage.
2. Shine a bright flashlight into his eyes, one at a time. The pupils should be equal, and each should contract, or narrow. Unequal pupils, or one that does not contract with the light, indicates a brain concussion of a serious nature. (We will talk about head injury and the management of the unconscious patient later on.)
3. Gently move his neck, feel the entire length of his spine with your fingertips, from the base of his skull right down to, and including, his tail bone. Extreme tenderness or soreness should make you suspect a spinal injury.
4. Ask him to take a deep breath. A sharp pain in his chest may mean broken ribs. Press hard on the breastbone with your right hand and the mid-back behind with your left. This will cause pain at the site of a broken rib, just as pressure on opposite sides of a barrel springs the hoops.
5. Feel his belly gently with the flat of your hand. He may have internal injuries that won't be evident for several hours, but if his belly-wall muscles are contracted hard, and he cannot relax them when you ask him to, he probably has some such injury.
6. Finally have him move all fingers, toes, both hands, feet, ankles, wrists, arms, legs, elbows, knees, shoulders, and hips. Note if any of these hurt or are deformed or lying at an odd angle.
7. Finally you conclude:
   a. There is no serious brain damage. He is conscious, alert, knows the day of the week (as well as anyone ever does on a long cruise), where he is, and is well oriented. His eye pupils are equal and contract alike.
   b. Findings 3,4,5 and 6 are within normal limits.

Whitewater Rafts

Rafting is sometimes the only way to get down a river. They flow resiliently along as part of the water, and can be packed into remote areas. For mild rapids, a "Hong Kong Special" discount store raft will do if loaded to ½ rated capacity. For serious work you'll need a serious raft from a reputable manufacturer. These aren't cheap: $400.00—$1500.00

—JB

Two good makers are:

Avon Rubber Co. Ltd. (Pg. 284)
Inland Marine Co.
79 E. Jackson St.
Wilkes Barre
PA 18701

Rubber Fabricators, Inc.
Richwood, WV 26261

Length: 12'
Beam: 5'6"
Tube diameter: 16"
Tube material: 9A
Bottom material: 9A
Air chambers: 2 plus 1 seat
Accessories included: D-rings
Options: Class 7 bottom
Weight: 85 lbs.
Color: Black
Built to 7-man military assault raft specifications, modified for white water use.

1,000,000 Miles of Canoe and Hiking Routes

A super bibliography listing detail maps for North American canoeists, hikers and bikers. Also many related books. Each item is briefly described. This is the most complete we've seen.

—JB

1,000,000 Miles of Canoe and Hiking Routes
$1.00 postpaid

from:
Ohio Canoe Adventures, Inc.
P.O. Box 2092
Sheffield Lake, OH 44054

CANOE TRAIL GUIDES

242 - TIMAGAMI TO LAKE WANAPITEI - An excellent guide to this remote 100 mile canoe route 75 miles north of North Bay, Ontario; includes map. PHOTOCOPIES (Postpaid)..... $ 1.50

243 - TIMAGAMI FOREST RESERVE - An excellent guide and map to a 120-mile canoe route reached by the Ontario Northland Railway. PHOTOCOPIES (Postpaid)..... $ 1.50

244 - CANOE AND HIKING IN THE FAIRBANKS, ALASKA AREA - A brief brochure and map showing the canoe and hiking routes; includes sketch maps. PHOTOCOPIES (Postpaid)..... $ 1.50

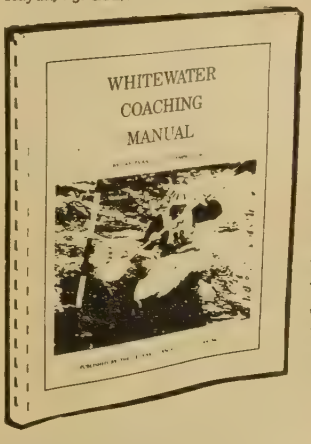
245 - MONTANA'S POPULAR CANOE STREAMS - A detailed description of over 20 of Montana's famous and remote streams suitable for canoeing. PHOTOCOPIES (Postpaid)..... $ 1.50

246 - RIDE THE WIDE MISSOURI RECREATION WATERWAY - A detailed description of the Missouri from it's headwaters through the state of Montana to Kipp State Park; with map. PHOTOCOPIES (Postpaid)..... $ 2.00

Whitewater Coaching Manual

Just what the title says. Whitewater people tend to seek increasing challange. This book outlines the training methods of a famous (and controversial) coach. Though it's aimed at competition, there are many things for the individual seeking to improve his condition and technique. *(Consult also* A White Water Handbook for Canoe & Kayak, *Pg.* 282*).*

—JB



Whitewater Coaching Manual
1973; 56pp.
$5.00 postpaid
from:
Jay Evans
U.S. Olympic Coach
Whitewater Slalom
201 McNutt
Hanover, NH 03755
or Whole Earth

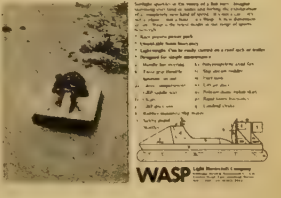
People sometimes scornfully refer to 'bedroom push ups' but they, too, take so little time each day yet work wonders to develop the tricep as well as the forearm. Three sets of 40 each all within two minutes is a reasonable goal to shoot for. And, now, while you're at it, down on that cold floor in the bedroom, simply stick your legs under the dresser and do 3 sets of 20 sit ups all within 40 seconds. Hold your hands behind your head, and then hold your body rigid at a 45 degree angle for 20 seconds afterward or until those stomach muscles really begin to shout with pain.

Light Hovercraft

Hovercraft are just the thing for zooming over swampland or going fast over water. They're noisy, though. If your needs can only be met by a hovercraft, you can now get little ones with payloads from 175 lbs to 500 lbs about $1300.00 to $3900.00 plus freight. Kits a bit less.

—JB

Catalog
from:
Light Hovercraft Co.
London Rd.
East Grinstead
Sussex
England RH19 2BH



Chestnut Canoes

Excellent canvas-wood and fiberglass canoes.

—Kathleen Whitacre

Catalog
from:
Chestnut Canoe Co.
Fredricton,
New Brunswick
Canada

Pointed stern: Henry, Dave, Alex, Joe, Chief, Jack (shown)

Boat Mind

Canoes and kayaks are among the better examples of enlightened technology. Sliding quietly through the water in a simple craft intimately under your control is one of the best antidotes to being overcivilized we know of. Craft fashioned from wood are the most esthetic in every way. Aluminum and plastic are usually more durable and don't require much care. Quality makes a real difference in these boats; buy the best you can. (Also see pp. 282-284)

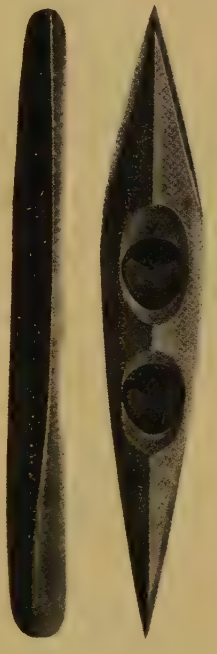
—J & K

"Hipp"

"Hipp" kayaks and canoes are some of the best, and are often found amongst the winners in whitewater competition. Some models come as kits. Their designs by Toni Prijon and Klaus Lettmann are ripped off by many imitators for good reason.

—JB

Catalog
from:
High Performance
Products, Inc.
25 Industrial Park Rd.
Hingham, MA 02043



C-2 Lettmann WW Spezial $300

Eddyline Kayak Works

Competition, whitewater, flatwater touring kayaks and closed canoes and kits, vacuum laminated of epoxy/fiberglass. Super strong and light.

—Kathleen Whitacre

Eddyline Kayak Works
Northwest
8901 Aurora Ave. N.
Seattle, WA 98103

The Stripper's Guide to Canoe Building 1972

Beautiful. Made (by you) of many quarter-inch thick strips of Sitka spruce skinned with transparent fiberglass.

—Kathleen Whitacre

The Stripper's Guide To Canoe Building
1972
David Hazen
$5.50 postpaid
from:
Wilderness Boats
Friend, OR 97025

Wilderness Boats

Delivering a canoe is like making love, getting pregnant, labor pains, birth, and caring for that vessel of love to its maturity. I do not build canoes—— canoes build me. I am merely one of the instruments by which canoe-essence tries to manifest itself.

—David Hazen

Outdoor Sports

Plans and kits for canvas, wood and fiberglass kayaks, folding kayaks and small sailboats. Also finished glass canoes. Unusually handsome.

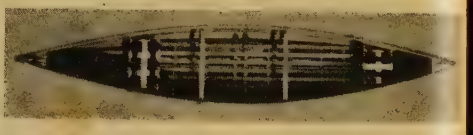
—Kathleen Whitacre

from:
Outdoor Sports
P.O. Box 1213
Tuscaloosa, AL 35401

Trailcraft

Especially nice wood & canvas kits. Also fiberglass canoe, sailing canoe and kayak kits.

—Kathleen Whitacre



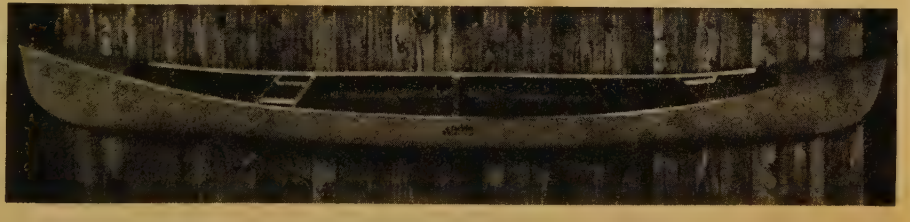
$69 to $218
plus shipping
from:
Trailcraft
Box 606
Concordia, KS 66901

Keewaydin Canoes

Tubbs is one of the best. They make open canoes C-2's and K-1's.

—JB

from:
Tubbs of Vermont
Forest Dale, VT 05745



Quick-N-Easy Roof Racks

These are the best we've seen.

—JB

Catalog
from:
Quik-N-Easy Products
934 W. Foothill Blvd.
Monrovia, CA 91016

Voyageur Camp-pak

Waterproof bags for stowing your stuff in canoe or raft.

—JB

$4.25-$7.95
from:
Voyageur Enterprises
P.O. Box 512
Shawnee Mission
KS 66201

V 16

V15 Expedition Camp-Pak, 24"x60" $6.55 PP
V16 Expedition Camp-Pak with Pak-Guard Outer Bag $9.05 PP

Riverside Fiberglass Canoe Co.

Wood & fiberglass kits for a fine duck boat. Also kayaks and canoes.

—Kathleen Whitacre

$44.95 to $64.95
plus shipping
from:
Riverside Fiberglass
Canoe Co.
P.O. Box 5595
Riverside, CA 92507

Kits

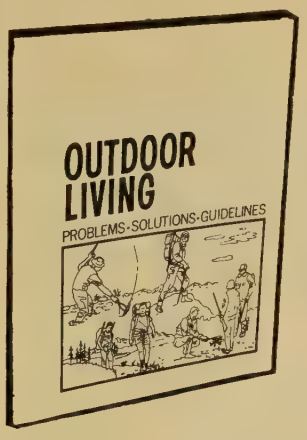
One way to beat down the cost of a canoe or kayak is to make one. It's a worthy enterprise. Kits range from total you-do-it, to cementing plastic Kayak halves together like a giant toy. If you're patient and make it right, a kit boat can be as good as a store bought one or even better, and much more satisfying.

—JB

Outdoor Living

A practical manual designed to enable you to survive an emergency outdoor situation. The authors assume a short-term problem, and that your immediate action will help assure rescue. Good mental attitude is the name of the game. Basic survival principles are discussed so you can think out clearly what to do. Good book for the money.

—JB



Outdoor Living
Fear, Simac, Lasher
109pp.
$2.50 postpaid
from:
Tacoma Mountain
Rescue Unit
P.O. Box 696
Tacoma, WA 98401

A review of actual outdoor survival emergencies requiring outside assistance indicates that the majority last only one day, with the weather contributing the greatest danger to life and sustaining energy. It was also noted that the critical period is the first six hours after the situation develops. Decisions made and actions taken during this period will determine the outcome of the experience.

•

Men can, and in survival must, learn the following facts about pain:

1. If you must move in order to survive, you can move, despite pain.

2. You can reduce pain by (a) understanding its source and nature; (b) recognizing pain as a discomfort to be tolerated; (c) concentrating on things you need to do, thinking, planning, keeping busy; (d) developing confidence and self respect, taking pride in your ability to take it. When the goals are your safety, your life, and your honor, and you value these goals highly enough, you can tolerate anything.

•

Cotton fabric has excellent properties in warm or moderate climates, and even provides excellent layer system dead air spaces for insulation against cold, as long as it remains dry. The danger of cotton fabric is that it absorbs and retains water, making it a deadly combination when it gets wet from rain, snow or perspiration. Cotton is very slow to dry because of the complete saturation of the fibers. Cotton clothing can become so saturated with water that the body heat loss can be nearly as great as when the body is totally immersed in water. Very wet cotton can lose heat nearly 240 times faster than dry cotton clothing.

•

RADIATION is a leading cause of heat loss in almost any situation, and the head is the most efficient portion of the body's radiator system. So rapid is the radiation from the head in a cold situation that heat loss from an unprotected, uncovered head can be enormous. An unprotected head may lose up to one-half of the body's total heat production at 40^0 F; up to three-quarters of total body heat production at 5^0. This proves the wisdom of the old mountaineers' maxim: "When your feet are cold, put on your hat." Parkas with attached hoods or balaclavas are essential for protection against this dramatic heat loss in cold, windy and wet situations.

Wilderness First Aid Kit Instructions

A little book that tells how to make a better first aid kit than you can buy, what to put in it, and why.

—JB

Wilderness First Aid Kit Instructions
Gordon S. Evans
1974; 16pp.
$1.00 postpaid
from:
Stirling Wilderness
Research Institute
P.O. Box 48
Manitou Springs
CO 80829

6 — Safety pins — 3 large and 3 small.

Securing arm slings, substitute button. Pinning tongue to lower lip in unconscious victim to be transported in rough terrain.

•

Hypothermia, Killer of the Unprepared

Read this—— even memorize it—— before tackling activities in cold weather or under conditions where weather may turn cold, wet and windy. Newspapers call Hypothermia "exposure". It's sneaky.

—JB

Hypothermia, Killer of the Unprepared
Theodore G. Lathrop, M.D.
1972, 23pp.
$1.00 postpaid
from:
MAZAMAS
909 N.W. Ninteenth Ave.
Portland, OR 97209

1—— Know your enemy. Cold can be subtle and diabolical. Never underestimate its insidious power nor overestimate the strength of yourself or your companions. One weak climber or one small mishap can pin you to the mountain, exposed to weather and cold.

2—— Dress for warmth, wind, wet. In addition to peelable layers of climbing clothes which provide more-than-adequate warmth, every climber should carry windproof and waterproof outer protection of plastic or rubberized nylon. A hooded cape or jacket is not enough; you should also carry leg chaps or wind-rain pants. These items are light-weight, compact and relatively inexpensive. They should always be in your climbing pack.

In choosing your regular climbing clothes, remember that wool can be a climber's best friend. It has the peculiar virtue of drying from within, and therefore it is the only fabric that can provide warmth even when wet.

And don't neglect extra-warm protection for your head and hands. The back of the head and neck are especially vulnerable to cold.

3—— Eat! A continuous intake of food is a vital source of heat when combatting hypothermia. Carry plenty of food—— including a reserve supply of *extra* food. Keep nibbling! Sweets are most quickly converted into energy, while proteins and fats have a more lasting warming effect.

•

Survivit Manual

A folded-up pocket guide to simple first aid in the field, for those who have trouble remembering.

—JB

Survivit Manual
Loren A. Johnson, M.D.
1973; 20pp.
$1.00 postpaid
from:
Survivit Company
P.O. Box 334
Lake McQueeney, TX
78123

Emotional Effects on the Body—— Subconscious fear can cause a wide variety of disabling physical disorders which usually respond to general reassurance and control of the anxiety. Hyper-ventilation syndrome is one such condition in which over-breathing, due to anxiety, leads to a chemical imbalance in the blood. The imbalance may cause many bewildering symptons, including dizziness, tingling of the face and hands, spasms of the hands and feet, chest pain, and a feeling of shortness of breath. The symptons aggravate and prolong the anxiety and over-breathing and can mimic severe conditions such as asthma or a heart attack, terrifying the individual until he collapses from exhaustion. Suspect this condition whenever there is repeated sighing or heavy breathing without an apparent physical cause. Have the victim rebreathe his own air from a paper or plastic bag for several one-minute periods. With repeated reassurance and slowing of breathing, the cycle can be broken.

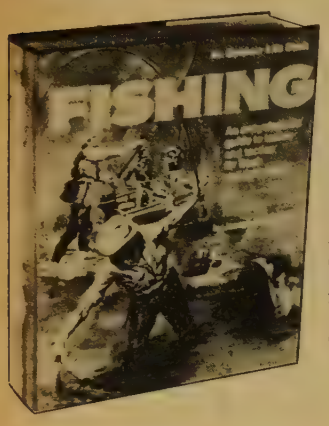
Item	Survival Items (Optional)	Reason
Thin plastic, 3'x3'		For constructing a solar still.
Bow string		Easier carried than made in the woods.
Arrow heads		The commercial hunting type.
Needle and thread		Repairing and making clothes, first aid.
Carbide		Starting fires under wet conditions.
Foil, aluminum		Shape it around finger, pour in the carbide, light it, then shape a small hole at the end and you have an effective torch.

•

Fishing

Looks like Bates has it all here—— all the tackle, tactics, and whatever else one should know about fresh and saltwater fishing. Think of something really out of the ordinary about fly fishing, or ice fishing, or rigging deep sea trolling tackle or the bio-psychological activities of pond trout at the spring ice break-up and how same can be used advantageously by the fisherman—— yawn!—— it's in there. Fifteen bucks gets you a lot of information.

—AP



Fishing
Joseph D. Bates, Jr.
1973; 718pp.
$14.95 postpaid
from:
Outdoor Life
E.P. Dutton & Co., Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

Two types of tackle principally are used for the surf: heavy spinning gear and conventional reels with revolving spools. The latter sometimes are called "squidding" outfits because their owners so often use squids as bait or their imitations as lures.

If a poll should be taken between the two methods, spinning would win by a wide margin. This is because the tackle is easier to use, mainly due to the fact that the reel won't back-lash, as revolving-spool reels will when thumbed improperly. Both types will cast about equal distances—— in the hands of experts, 500 feet or more. To do this, conventional tackle would need braided line testing about 36 pounds and a casting weight between 5 and 7 ounces, while spinning tackle would do as well with monofilament testing from 12 to 15 pounds (plus a shock leader) and a casting weight of only about 2 ounces.

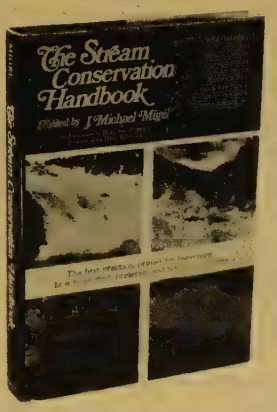
Rig for a dapping fly and a sinking fly (or bait).

Chapter 5 illustrated ways to use sunken baits with plastic floats. A question often asked is whether or not these little floats are practical for use with flies for trout. We could give the question a quick brushoff by saying that artificial flies should be used only with fly-fishing tackle, but this may not suit spinning and spincasting fishermen who want to try them. . . .The fisherman casts this rig upstream and across and takes in enough line so the dry fly is above water. By raising and lowering the rod tip he causes the dry fly to touch the water lightly and frequently as the float drifts downstream. Actually he is "dapping" the dry fly; a method as old as fly fishing itself. The fly dances on and just over the water, and trout very often rise up to take it. . . meanwile the nymph or wet fly is drifting down in the current several inches below the surface, and it is being given very slight motion due to the dapping of the dry fly. This is exactly the motion a nymph should have as it evidently is struggling to reach the surface. If a fish takes the nymph, and the take can't be seen, it is signaled by unusual motion of the float.

The Stream Conservation Handbook

"The first practical primer for fishermen—— how to protect, preserve, and restore our rivers." Buy it, read it, use what you learn. Don't just sit there shaking your head mumbling, "Now ain't it just a damn shame."

—AP



The Stream Conservation Handbook
Michael Migel, Ed.
1974; 292pp.
$7.95 postpaid
from:
Crown Pub.
419 Park Ave. South
New York, NY 10016
or Whole Earth

In addition to the formidable barriers posed by the dams and their turbines and impoundments, an even graver threat hangs over the river's fish populations: the little understood poisoning of water known as nitrogen supersaturation. Few fishermen have heard of it, but it is a deadly killer.

Fireside Angler

Nicely done 100 page catalog of good quality tackle mostly for the fly angler. Includes fly-tying materials and supplies, rod blanks and components, reels, tackle boxes, creels, vests and other gear plus a fair listing of books.

—AP

Fireside Angler
P.O. Box 823
Melville, NY 11746

FLY FISHING FOR TROUT

by Tom Macy

Chuang Tzu and Hui Tzu were strolling along the dam of the Hao River when Chuang Tzu said, "See how the minnows come out and dart around where they please! That's what fish really enjoy!"

Hui Tzu said, "You're not a fish—— how do you know what fish really enjoy?"

Chuang Tzu said, "You're not I, so how do you know I don't know what fish enjoy?"

Hui Tzu said, "I'm not you, so I certainly don't know what you know. On the other hand, you're certainly not a fish—— so that still proves that you do not know what fish enjoy!"

Chuang Tzu said, "Let's go back to your original question, please. You asked me how I knew what fish enjoy—— so you already knew I knew it when you asked the question. I know it by standing here beside the Hao."

—from **Chuang Tzu**

Fly fishing for trout takes you to such beautiful places that you don't really need to catch anything. But, if you want to catch trout, you have to go to the river and study them like Chuang Tzu to see what they enjoy. Further you have to imitate, with a fly, what they enjoy near enough to their lair to arouse and hook them. This is quite difficult because "trout do not lie or cheat and cannot be bought or bribed or impressed by power, but respond only to quietude and humility and endless patience." (Robert Traver, **Anatomy of a Fisherman**.)

Good fly fishermen, the small handful who catch most of the fish caught, often spend as much time studying the stream, rolling over rocks for nymphs, and experimenting with different flies and techniques as they do actual fishing. The beginner or expert can best progress by getting to know one river well; the insects, aquatic and terrestrial; the pools, holes, pockets, and undercut banks; where and what fish feed on and at what time. A simple stream diary patterned after Schwiebert's in **Matching the Hatch**, helps you keep track. Most trout streams have fishermen who love and understand them and who can catch fish in them under practically all moods and conditions. Much can be learned from these fishermen, but real success comes from spending many hours throughout the fishing year being creative and willing to experiment rather than accepting the dogma that has limited someone else's success. Most major advances in fishing technique and knowledge have been the result of careful study and experimentation.

Below I have listed fishing catalogues of reliable companies and some of the major books on fly fishing that have helped countless fishermen. If you were to limit yourself to two books, I would suggest Joe Brooks' **Trout Fishing** and Schwiebert's **Matching the Hatch.** This of course assumes that you have already read **Trout** by Bergman.

FLY FISHING BOOKS

A River Never Sleeps, Roderick L. Haig Brown

Haig Brown, a famous Canadian sportsman and naturalist who lives on the banks of the Campbell River on Vancouver Island, British Columbia, is known first of all as a great writer who writes of fishing not as a sport but as an art. He describes the wonderful experience it is to know a river and the rhythms of life in it. He knows the Campbell intimately and takes you to it and other favorite Pacific Northwest waters month by month in pursuit of winter steelhead, spring sea run cutthroats, summer trout and the fall spawning salmon run. He has three other excellent books that I can't resist suggesting that you read: **Return to the River** (1941) which is about the life cycle of a Columbia River Chinook, the **Western Angler** and **A Primer of Fly Fishing**, one of the best "How To" books for beginners and experts written. The above are out of print, but are available for $15.00 or less in old book stores, or from the **Angler's and Shooter's Book Shelf**, Goshen, Connecticut 06756, (203) 494-2500. All are well worth the trouble in acquiring. His books take you to the river when you can't get there yourself—— which is too often.

Larger Trout for the Western Fly Fisherman by Charles E. Brooks, A.S. Barnes and Company, $8.50.

For the experienced fisherman. Excellent on wet fly techniques for large trout especially in Montana streams: the Madison, Firehole and Yellowstone. Also mentions the good old days on the Eel, Yuba, and Merced before they were Californicated.

The Complete Fly Tier, Reuben Cross; Freshet Press 1971, $7.95.

Cross is the head of the school of east coast fly tiers like Harry Darbee and others in the Catskills. He details the steps for beginners and experts towards tying the perfect fly in a practical guide for dries, wets, nymphs, steamers and bucktails.

Trout, Ray Bergman; Knopf 1952, $12.50.

Originally published in 1938; revised and enlarged in 1970, this still is the best and most popular "How-To" fly fishing book written. Bergman covers the fundamentals of dry, wet, nymph and streamer fly fishing in clear simple language. The first book you should read, beginner or expert.

McClane's Standard Fishing Encyclopedia and International Angling Guide, Ed. A. J. McClane 1965, $19.95, Holt Rinehart & Winston.

This guide written by A.J. McClane, fishing editor of **Field and Stream Magazine**, is the Larousse of fishing. McClane supervised 141 angling experts and marine scientists to describe over 1,000 species of fish throughout the world, with specific information on the waters of the 50 states, Canada, Europe, South America, Africa, the Bahamas, New Zealand and Australia. Techniques for all conceivable types of fishing are described with complete courses on rod building, scuba diving, fly tying, marine biology, raising bait fish, and fish cookery. A good resource book you can always get answers from and one that distracts you, with color plates, drawings and diagrams of fish, flies, filleting, entomology, into a whole night of reading each time you look something up.

Matching the Hatch, Ernest G. Schwiebert, MacMillan, $7.50.

A basic and complete guide to applied entomology that tells fly fishermen what insects hatch at what time of day during spring, summer, and fall on eastern and western rivers. Color prints, sketches, and black & white prints depict the insects. Basic data on 46 mayflies, 19 stone flies and 20 caddises is tabulated in the back of the book: genus, species, water types they are found in, emergence times and appropriate imitations. A fundamental book and still the best written on the subject.

A Modern Dry Fly Code, Vincent Marinard; Crown, $10.00.

First published twenty years ago and now available from Crown MacMillan for $10.00, the **Dry Fly Code** is an excellent guide for fly fishing spring creeks and limestone streams, where long fine leaders, tiny flies, and exact imitations are needed. An extraordinary sequence of photographs shows a trout rising to natural insects. This revolutionary book started the whole trend of careful study and imitation of natural insects. In it, the author develops terrestrial as well as aquatic patterns that imitate the minutiae trout feed on in clear streams—— the famous midge and jassid patterns among others.

Trout Fishing, Joe Brooks; Harper Row, $8.95.

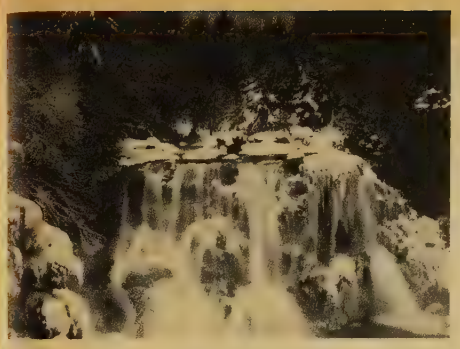
A study of all aspects of trout fishing, with colorful tales of fishing the world's great rivers with the world's great anglers. Brooks is excellent on casting techniques and has two important chapters on the playing and landing of fish, and the art of wading—— seldom discussed, but critical subjects. The author also includes a complete state by state list of reliable fly tiers and fishing tackle dealers he has known and dealt with over the years.

Salt Water Fly Fishing, George X. Sand; Knopf, $8.95.

An old pro and pioneer with fly rod in salt water tells you how to and where to fly fish in your local ocean: for striped bass in San Francisco Bay or Coos Bay, Oregon, for bonefish and tarpon in Florida, for sharks and bottom fish wherever you might fish in the ocean, and countless others including flounder, sailfish, tarpon, sea trout and marlin. Much detailed local information for both coasts is included drawing on well-known local fishermen who developed the techniques—a very useable book.

Nymphs, Ernest Schwiebert; Winchester Press, $9.95.

Nymphs is a monumental reference work on the immature stages of aquatic fly hatches that make up 90% of the trout's diet under normal conditions. Three hundred insects



As water plunges over the spillway of a high dam, air is trapped and carried down with it, deep into the stilling basin below. There the pressure of the falling water compresses the air, causing abnormal quantities of nitrogen to be dissolved. Fish exposed to these excessive levels suffer about the same consequences as human divers who rise to the surface too rapidly and suffer the crippling or killing affliction known as the bends.

For fish, the results are horrible. Bubbles of free nitrogen appear under the skin and in the fins, tail, and roof of the mouth. The eyes protrude or hermorrhage, and in extreme cases are actually blown out of the head.

Nitrogen supersaturation in the Columbia and Snake has reached a level where it threatens the survival of all fish migrating through or living in the water. The system has been converted into an ecological minefield.

Salt Water Tackle Box

Forty-five page catalog featuring a nice line up of saltwater tackle.

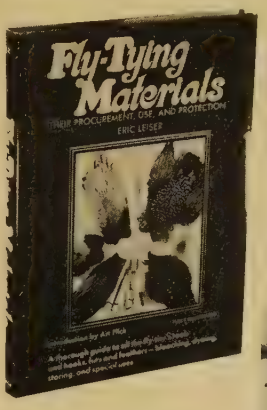
—AP

Salt Water Tackle Box
P.O. Box 263
East Falmouth, MA 02536

Fly-Tying Materials

Here it is. This is the book you fly-tying buffs have been waiting for. It thoroughly covers all the materials needed by the fly-tier: the feathers, fur, hooks, synthetic materials, departed species and their substitutes and the necessary tools. That's not all. There are chapters on dyeing and bleaching—— tightly guarded secrets; the skinning and cleaning of birds and animals; uncommon uses of natural materials; special sources of supply for fresh and saltwater materials—— and much more. Illustrated with many, many good how-to photographs, here's one book that has been priced low compared to its information content.

—AP



Fly-Tying Materials
(Their Procurement, Use, and Protection)
Eric Leiser
1973; 191pp.
$7.50 postpaid
from:
Crown Publishers
419 Park Ave. South
New York, NY 10022
or Whole Earth

Having located the whereabouts of a chicken farm, you should bear in mind only one important consideration, and that is *when* to go. If you happen to be reading this book in the middle of the summer, I strongly urge you not to bother with the chickens at all, because their plumage will leave something to be desired. In fact, with certain exceptions, most of your raw materials in the form of feathers and furs should come from animals during the *prime season*, which in the Northern Hemisphere ranges between late November and early April.

Fly Fisherman's Bookcase and Tackle Service

Strictly for the fly fisherman—— Fenwick rods, Scientific Anglers rods and line, Hardy reels, Perrine boxes—— it's all there, plus a select listing of the top books on fly fishing, the new and the old. Write for their well-illustrated 56-page catalog.

—AP

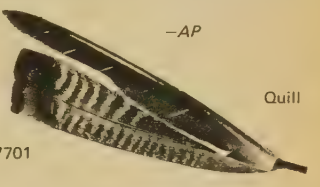
Fly Fisherman's Bookcase and Tackle Service
138 Grand St.
Croton-on-Hudson, NY
10520

New **▲Dubbing Needle**
Smaller than the Thompson bodkin, fine for delicate work. Tooled aluminum handle. Reg. $1.00 **Your Price $.80**

E. Hille

One of the best sources of tackle and fly tying gear for the serious fly fishing buff. Hille's 98-page, indexed catalog fully explains each item listed, and is particularly descriptive of fly tying materials. Well rounded inventory, good prices, and good service.

—AP

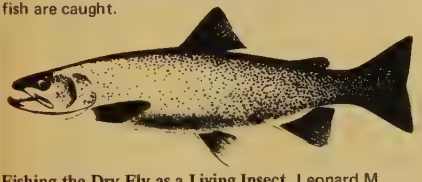


Quill

E. Hille
P.O. Box 269
Williamsport, PA 17701

For quill bodies, various materials can be used. Unfortunately all of the natural quill body materials are weak. The sharp teeth of trout easily cut a strand and ruin the fly. To overcome this difficulty, it is recommended to wrap the finished fly body in the opposite direction with fine wire, No. 389, gold or silver. Additional protection is provided by a coat of clear lacquer. Plaston is a very strong quill body material. It cannot be damaged and needs no protection. Quill bodies on an artificial fly are the closest imitation of the natural fly body.

and their imitations are covered and 18 full color plates and dozens of black & white illustrations depict some 200 of them. Trout are selective feeders under as well as above the surface, and a study of Nymphs will enable you to imitate nymph activity throughout the seasonal cycle on your own streams. Schwiebert gives you the knowledge of the overlooked world below the surface where most of the fish are caught.



Fishing the Dry Fly as a Living Insect, Leonard M. Wright, Jr., $6.95, E.P. Dutton, Inc.

The first book to do justice to the caddis flies so commonly found on our trout streams. Also a detailed description of the author's "sudden inch" method of jerking a dry fly caddis imitation to attract a strike.

I have been told these are excellent: **Flies,** J. Edson Leonard; **Fly Tying,** William Baird Sturgis, $8.95, Scribners; **The Fly and the Fish,** John Atherton, Freshet Press.

FLY FISHING EQUIPMENT CATALOGS

R. L. Winston Rod Company
475 Third St.
San Francisco, CA 94107
(415) 781-3979

One of the great names in American bamboo and glass rods. Originator of famous "fluted hollow" bamboo rods that won all Western fly casting tournaments. Winston still produces the same quality rods that originally made it famous.

Very low key catalog and an excellent retail store, staffed by the new and old owner, Tom Morgan, an expert West Coast angler and Doug Merrick, who has built Winstons for 30 years and is known as one of the finest bamboo rod craftsmen in the world. Winston will make practically any type of rod; fresh or salt water, fly, bait casting or spinning. The only company I would order a bamboo rod from without flexing it first. A good fly rod lasts a lifetime and is a source of endless pleasure. ($65.00 for glass rods and $165 for bamboo). Also does excellent repair work on old Payne, Leonard, Orvis and Powell bamboo rods. Both Doug and Tom can provide you with reliable information on most West Coast streams from California to British Columbia.

Len Codella's Anglers Den Inc.
5 South Wood Avenue
Post Office Box 701
Linden, NJ 07036

Quality trout tackle and fly tying equipment. A good stock of Walker trout reels and a grade A natural blue dun capes—— a rare find.

Angler's and Shooter's Bookshelf
Goshen, CT 06756

Rare and out of print books. Good fishing books seem to go out of print too fast. Fair prices and fast service.

The Orvis Company, Inc.
Manchester, VT 05254
(802) 362-1300

A very ritzy catalog with complete line of essentials and non-essentials (whiskey glasses with trout fly emblems) for fishermen and outdoorsmen. Fun to look through, but a bit expensive and frilly.

Dan Bailey's
209 West Park St.
Box 1019
Livingston, MT 59047

Reasonably priced flies from the originator of many famous western flies. Many tackle stores buy their flies from Dan. On the cover of catalog is a remarkable picture of a Royal Coachman Dry Fly resting on the surface film.

Reed Tackle
Box 390
Caldwell, NJ 07006

Materials for fly tying reasonably priced. Also excellent fiberglass rod-making kits and all you need to make your own fly leaders and spinning lures.

Three excellent catalogs that feature hunting and fishing equipment at discount prices are:

Dave Cook's Sporting Goods
Denver, CO
(Big discount house)

Herter's
Waseca, MN
(Excellent for fly tying, also very cheap flies)

Parker Distributor
New Rochelle, NY
(Discounted glass rods and spinning reels also binoculars and sunglasses)

In Canada:

Harkley & Haywood Sporting
Vancouver, BC
(Big catalog, well-stocked retail store, very good information on Western Canada fishing. Well worth a visit.)

RETAIL STORES AND FISHERMEN

A quick list of retail stores and professional fishermen that I have known and think worthy going out of your way to visit for local information.

California

Fresno: Herb Bauer Sporting Goods

San Francisco: T.S. Tackle (excellent reel repair shop), R.L. Winston

Dunsmuir: Ted Fay, Trout guide and maker of weighted wet flies. One of the best wet fly fishermen in the country. never fish the upper Sacramento without a visit with Ted first. Also Ted is one of the best rough stream waders around.

Visalia: Buz's Fly & Tackle Shop

Happy Camp: Jim Roads (top notch Klamath River Steelhead Guide)

Colorado

Denver: Dave Cook Sporting Goods

Littleton: Angler's All Ltd.—— Proprietor, Jim Poor is an artist with midge rods and tiny flies.

Montana

Gardiner: Parks Fly Shop proprietor is expert fisherman, guide and fly tier. Good for information on the Yellowstone River, the Firehole and Henry's Fork of the Snake.

Livingston: Dan Bailey's Fly Shop—— Proprietor, Dan Bailey and staff very informative on Montana streams. Every year the world's top fishermen pass through Dan's shop to chat. Dan originated many of the fly patterns in his catalog and is still considered a top fly tier and fisherman.

New Jersey

Linden: Len Codella's Angler's Den, Inc.

Morristown: Ken Mills Sporting Goods

Caldwell: Reed tackle

New York

Livingston Manor: Harry Darbee. Good information on Beaverkill and Willawemoc Rivers. Harry and his wife, Elsie are two of the best fly tiers in the country. Examples of their exquisite work, as well as Dan Bailey's for that matter can be found in the color plates of popular fly patterns in **McClane's Standard Fishing Encyclopedia.**

Wilmington: Adirondack Sport Shop—— Proprietor expert tier and fisherman. Good information on the Ausable River.

Oregon

Idleyld Park: Steamboat Inn. Steelhead information for Rogue River. A favorite hangout of steelheaders.

Lake Oswego: The Barbless Hook

Portland: Don's Tackle Shop. Proprietor expert glass rod-maker and steelhead guide. Good information on Deschutes and other top Oregon Rivers.

There are many other good shops and guides in the country. Practically every river has one or both. It is always a pleasant surprise to stumble on one.

NOMADICS

Desert Solitaire

The desert perceived on its own terms by one very skilled. How to perceive, how to fight (for your survival or the desert's), how to die well when life requires it.

—SB

Desert Solitaire
(A season in the Wilderness)
Edward Abbey
1968; 303pp.
$ .95 postpaid
from:
Ballantine
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Look, the party chief explained, you *need* this road. He was a pleasant-mannered, soft-spoken civil engineer with an unquestioning dedication to his work. A very dangerous man. Who *needs* it? I said; we get very few tourists in this park. That's why you need it, the engineer explained patiently; look, he said, when this road is built you'll get ten, twenty, thirty times as many tourists in here as you get now. His men nodded in solemn agreement, and he stared at me intently, waiting to see what possible answer I could have to that.

"Have some more water," I said. I had an answer all right but I was saving it for later. I knew that I was dealing with a madman. . . .Teamwork, that's what made America what it is today. Teamwork and initiative. The survey crew had done their job; I would do mine. For about five miles I followed the course of their survey back toward headquarters, and as I went I pulled up each little wooden stake and threw it away, and cut all the bright ribbons from the bushes and hid them under a rock.

•

I hit rock bottom hard, but without any physical injury. I swam the stinking pond dog-paddle style, pushing the heavy scum away from my face, and crawled out on the far side to see what my fate was going to be.

Fatal. Death by starvation, slow and tedious. For I was looking straight down an overhanging cliff to a rubble pile of broken rocks eighty feet below.

•

I stood on the top of the pile and stretched upward, straining my arms to their utmost limit and groped with fingers and fingernails for a hold on something firm. There was nothing. I crept back down. I began to cry. It was easy. All alone, I didn't have to be brave. . . .

Winter Hiking & Camping

Though the subject matter is covered in other books, this one specializes. There are many aspects of cold weather work that are not intuitive; you have to be taught. This handbook does a good job. It's comprehensive, well indexed, and agrees well with my own experiences living in interior Alaska. There is special coverage of Northeastern USA conditions, but most of the book is applicable anywhere. Too bad they don't have regional editions. It's pocket size so you can take it with you.

—JB

Winter Hiking and Camping
John A. Danielsen
1972; 192pp.
$4.50 postpaid
from:
Adirondack Mountain Club
172 Ridge St.
Glen Falls, NY 12801
or Whole Earth

Energy Expenditure in Various Types of Activities

Activity	*Energy Spent per Day (Kilogram-calories)*
Basal (lying in bed)	1,500
Sedentary occupation	2,500-3,000
Heavy manual labor	4,000-4,500
Mountain walking (oxygen consumption actually measured en route): 3 miles along roads, 10 miles cross country, 2,550 feet climbed	4,110 (day total)
	Energy Spent per Min.
Manual labor	6-10
Walking:	
Flat roads	6.5
Cross country:	
Level	8.5
Climbing steeply	11
Descent	7

Cream Rises

CAMPING EQUIPMENT

Eastern Mountain Sports *Huge variety. Good service* **268**

Moor & Mountain *Especially skis, canoes and kayaks* **269**

Holubar *Super quality* **267**

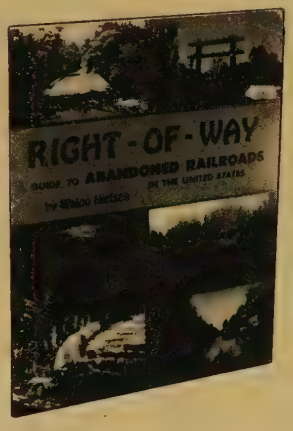
Sierra Designs *Best in the West* **264**

REI *Very wide choice and price range* **266**

Right-of-Way

A tantalizing set of detail maps with brief descriptions and history of some of the lines, and the sort of thing you're likely to encounter while exploring the old roadbeds. Some have already been converted into bike trails, an idea that could be encouraged.

—JB

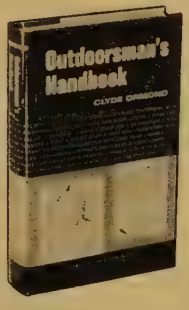


Right-of-Way
(A Guide to Abandoned Railroads in the United States)
Waldo Nielsen
1972; 124pp.
$4.95 (a new edition is coming)
from:
Old Bottle Magazine
Box 243
Bend, OR 97701

Outdoorsman's Handbook

A professional Woodsman tells what he's learned over many years. Oriented pretty much toward campcraft, hunting and fishing, there's skinning instructions and how to tie flies and how to call a moose. The book is strong in discussing pack animals, too.

—JB



Outdoorsman's Handbook
Clyde Ormond
1970, 1972; 336pp.
$5.95 postpaid
from:
E.P. Dutton & Co.
201 Park Ave. South
New York, NY 10003
or Whole Earth

Tethering a horse to low bushes.

Equipment

Regarding outdoors equipment, I've recently begun to believe that for all but the real expedition/mountaineer/equipment fanatic that most of "name brand" stuff is far better than needed. There is a Japanese made Alpenlite-type rack that sells for half the American made and is very close in quality all around, ditto for down filled sleeping bags by North Face, etc. For most people a Fiberfill II bag might be a better investment (perhaps getting a down inner bag for winter use).

—David Brook

Noamtrac

North American Trail Complex is an organization trying to establish trail systems and "strip parks" all across the U.S.A., Canada and Mexico. They've progressed to the point of actually making hard proposals (with maps) which can be presented to local authorities by local people. There's still a lot of work to do. Might be you could help.

—JB
[Suggested by David Brook]

Information
Stamped self-addressed envelope to:
NOAMTRAC
P.O. Box 805
Bloomington, IN 47401

Every effort should be made to avoid robbing the hiker of personal discovery and adventure, by discouraging the development of guidebooks which describe every bend in the trail and reveal every azalea field and chestnut stump along the way. NOAMTRAC guide maps should be visually illustrative only, without extensive accompanying literature.

Himalayan Porter's Stick

A beautiful object, either to be used a lot or not at all, it might wind up hanging on your wall.

—Bob Easton

Himalayan Porter's Stick
33" or 36" length
ash (natural) or walnut color
$26.40 postpaid
from:
T. Dion Warren
P.O. Box 4775
Santa Barbara, CA 93103

Packrat Papers

Tips for Trail Meals and Cooking, and Tips and Helpful Hints for Hikers. A genuinely useful trail (lightweight) "cookbook" section; we haven't seen the new edition with hiking tips yet.

—Kathleen Whitacre

Packrat Papers
1974
$3.95 postpaid
from:
Signpost Publications for the Northwest Outdoors
16812 36th Ave. West
Lynnwood, WA 98036
or Whole Earth

G.N.U.R.D.S.— Gnurds are Goodies Nibbled Under Really Desperate Sircumstances, and they are what you find at the very bottom of your parka pockets.

•

CAFE COCOA— A good camp drink, if you don't carry a wine skin, according to one Signposter is to mix one Nestle's or Swiss Miss packet with one coffee packet and add hot water. Kinda like what they serve at coffee houses for lotsa money.

Backpacking One Step At A Time

This book has been needed for a long time. It isn't a manual intended for paramilitary survival combat with the elements, nor is it a "my experiences and methods of wilderness camping." It's a book intended to provide the basic information needed to get ready for the trail and have a fine time while on it. The author speaks to people who haven't done it before, particularly families. Discussions are geared to contemporary conditions and currently available equipment, so the information can be easily put to use. Where there is controversy about equipment (you can get into a considerable argument in any mountaineering store) the most commonly accepted solution is offered. Choices and reasons for them are given where performance requirements might differ enough to make trouble. All in all a very fine way to get into trail hiking if you're not already into it or if your technique has a tendency to leave you cold, wet, tired, bitten and hungry.

—JB

Backpacking One Step At A Time
Harvey Manning
1973; 356pp.
$2.95 postpaid
from:
Vintage Books
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Manuals are full of rules: one expert declares a stop is mandatory every 40 minutes, lasting precisely 2 minutes—— he also forbids hikers to sit down! Rules are fine and resting by the clock and marching by the whistle is appropriate en route to battle; civilians generally prefer walking in a less well-organized fashion.

•

. . . Most backpackers worry excessively about food. Beginners especially, not having experienced the Depression, or the daily existence of millions of people on this Earth who feel lucky to have a supper of a bowl of rice and the tail of a fish, are likely to think they will faint and fail and die within hours of their departure from the road unless they maintain a regular succession of "well-balanced meals."

•

Through use of dried foods and those naturally low in water content, shucking cardboard packaging, and moderately careful menu planning, it is possible to feed the average hiker to repletion on 2 pounds of food per day. By more precise planning the job can be done with 1-1/2 pounds. And if the party members are willing to leave a bit of lard along the way and endure pangs while stomachs shrink, with 1 pound. At this point, though, about the fifth evening the hiker will look into the setting sun and see not the majestic drama of day's end but only a great fried egg dripping hot butter.

•

The Ten Essentials. Top row: extra clothing (here, a sweater and storm shelter), sunglasses. Middle row: first-aid kit, extra food, flashlight (and extra cells). Bottom row: map, compass, matches, firestarters, knife.

CAMPGEAR KITS

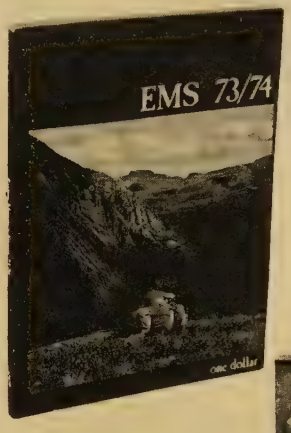
EMSKITS include rain and wind gear (for kids too), a tent frame-- pack sack and ruck sack. Inquire about new line of Polagard polyester insulated jackets and sleeping bags.

Carikits from Holubar include raingear, limited selection of down jackets, 60/40 parka, children's gear & bags, 2 tents, packs and 3 sleeping bags, down sleeping bag collar, plus other items. Seems to be consistently more expensive.

Frostline Kits—— (p. 262) have everything which the other two have plus five tents, complete bicycle pack outfit, and baby carriers, including the famous Gerry Kiddie pack.

Prices on all the equipment are good compared to ready made. The fattest down parka kit $36.95. There seems to be controversy (as with most outdoor equipment) as to the ease of construction of these kits among the users. They all seem to have cheerful "Satisfaction Guaranteed" policies; Eastern Mountain Sports says novices seem to understand the instructions more easily than experienced seamstresses, and the most satisfied customers are those who enjoy making their own equipment, not those attempting to save money.

—Kathleen Whitacre

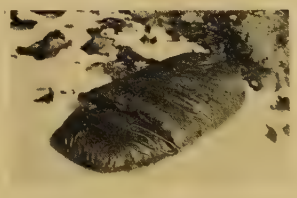


Eastern Mountain Sports Catalog
$1.00 postpaid
from:
1041 Commonwealth Ave.
Boston, MA 02115

EMSKIT Knapsacksnackpack Rucksack.
A sew-it-yourself kit. Frame is not required. For the mountaineer and backpacker who desires a medium sized rucksack for day hikes we offer the knapsacksnackpack rucksack. Made from 8 oz. per/sq. yd. super-urethane coated nylon duck with an 11 oz. nylon cordura reinforced bottom. Two large nylon coil zippered side pockets. A third zippered pocket is in the top flap. It comes with padded shoulder straps, waist belt, ice axe loop and accessory strap leather squares. Weight: 1 lb. 6 oz. Height 17", Width 13', Depth 7½" One size in navy or orange. MSKP08 Emskit Ruck Sack $18.00

Carikit-Holubar
Complete catalog which includes competitive companies' products
$1.00 postpaid
from:
Box 7
Boulder, CO 80302

Carikit INCHWORM



A Children's Bag That Grows With Your Child!

Natural Food Backpack Dinners

Reports anyone?

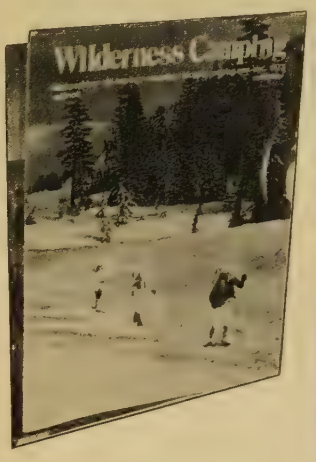
—SB

Natural Food Backpack Dinners
$1.25 to **$1.40** postpaid
from:
Natural Food Backpack Dinners
P.O. Box 532
Corvallis, OR 97330

Wilderness Camping Magazine

Includes backpacking, ski touring, canoeing, bicycle camping through various issues. An interesting magazine, even for those who are old hands at hiking and canoeing. Certainly a welcome contrast to the new super slick "ten reasons why you should go backpacking" type magazines.

—Kathleen Whitacre

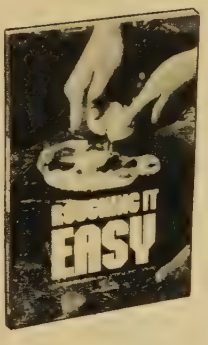


Wilderness Camping Magazine
Bill Dennebaum, Ed.
$4 /yr (6 issues)
from:
Wilderness Camping
1255 Portland Place
Boulder, CO 80302

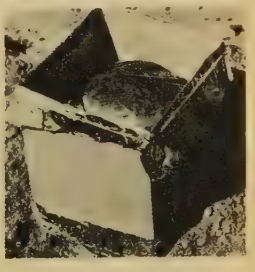
Roughing It Easy

Mostly for those who like to do ingenious no-pot cooking while outdoors. Really good for car camping, horse packing or scout camping.

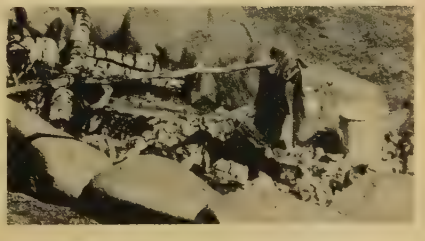
—Kathleen Whitacre



Roughing It Easy
Dian Thomas
1974; 203pp.
$5.00 postpaid
from:
Brigham Young Univ. Press
205 UPB
Provo, UT 84602
or Whole Earth



Bread baking in see-through cardboard box oven



Eggs and bacon cooking over coals in paper bag

How to Camp and Leave No Trace

Ethics of camping by an honored old hand.

—SB

How to Camp and Leave No Trace
Gerry Cunningham
1972; 15pp.
Free
from:
Gerry Division
Colorado Outdoor Sports Industries
P.O. Box 5544
Denver, CO 80217

A fire that leaves no trace must be kept small. This also makes it easy to gather the wood without leaving a trace. Any wood you can break in your hands or hit against a rock will be suitable for a small fire. Saws, axes, hatchets and large knives are useless weight to the modern wilderness traveler. A dozen thumb size sticks about a foot long are sufficient for cooking a meal or two, and you gather only enough to do the job.

Warmlite

The definitive sleeping bag. We listed Warmlite in the Catalog *when all they made was excellent tents. Now they have improved the tents and expanded their line to other items, notably their down bag, and a unique backpack.*

Its most radical innovation, which others will soon imitate, is the use of a moisture-and-heat-reflective inner lining—— the principle being that when the humidity in the bag goes up, sweating stops (short of discomfort). So the bag is warm as soon as you climb in, and it won't gain moisture weight during the night. Temperature is controlled by a baffle system around the neck and shoulders, and several zippers.

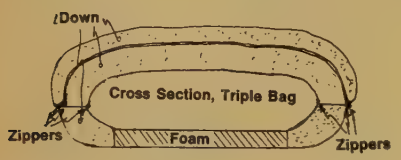
The Warmlite bag has a polyether foam mattress built in. Zippers on both sides permit joining the bag to another or to as many as you like (the Stephenson catalog shows 27 zipped together). The zippers also give the choice of 1) a thin goosedown top, 2) a thick one, 3) both, for arctic occasions—— hence the name Triple Bag. It's expensive, and worth it for a lifetime bag. $140-175 depending on size.

Jack Stephenson is one ingenious engineer, with considerable heart and humor, as shown by the charming catalog models—— nude inventor, family, and staff.

—SB

Warmlite Catalog
$1.00 postpaid

from:
Stephenson's Warmlite
23206 Hatteras St.
Woodland Hills, CA
91364



Go Lite Pack

Features: 1. True hip carry systems (3 point suspension, no front belt or pressure on backbone), rapidly adjustable to any position. This hip carry is far more comfortable, and gives far better pack control, than any other type of carry. The 3 point suspension system used allows flexibility over the hip, so the normal alternate rise and fall of each hip is easily accommodated (unlike the rigid hip suspension of several other hip-waist band carry packs which were improperly copied from the original Jack Pack).

•

Go Lite Packs	*Small*	*$62.00*
	Med.	*66.00*
	Large	*70.00*

27 Warmlites, Zipped Together

Warmlite Tents	*2R*	*$150.00*
	3R	*190.00*
	5R	*240.00*

Synergy Works

Daniel Shurman dropped by with some of the best designed gear we've seen (and numerous letters of praise from mountaineers who have been testing it). His coats are especially good, featuring a rarity: a neck-shoulder-hood arrangement that works beautifully. He also has a unique pack system. Sturdy too, yet light enough. A sure mark of good thinking.

—JB

Information from:
Daniel Shurman
Synergy Works
5351 Belgrave Place
Oakland, CA 94618

Brian G. Stokes

A source of European and English gear. Their climbing gear catalog is big and fat, so you better send them about $3 if you want it to come air mail.

—Kathleen Whitacre

Brian G. Stokes
Catalog
from:
Brian G. Stokes
Wellington Place
Liverpool Road
Manchester M3 8BL
England

6618 Cloggers
Made by Clogwyn of Wales, this device fulfills the need of an efficient economical prussiker. Karabiner locks rope cam when in use. Can be used for sac hauling.

post 16p

Mountain Safety Research Newsletter And Catalog

MSR is a periodical, issued, as far as I can tell, periodically. If you send them $5.00, they'll keep you on their mailing list for quite some time. MSR is a Consumer's Report for mountain equipment. They test ropes for breaking strength ice axes for same. . . If they don't like the results from any manufacturer's product, they make up their own product. I've had an ice axe and a rope—— both MSR—— for a couple years. Both are satisfactory; both were cheap. I haven't seen a test of their little stove. It looks very good.

—Jim Harding

Mountain Safety Research Newsletter and Catalog
$5.00 postpaid

from:
Mountain Safety Research
So. 96th. St. at
8th Ave. So.
Seattle, WA 98108

Comparison With Other Stoves

Compared with butane stoves, the MSR stove saves you $15 per year in fuel cost (assume one gallon/yr.) You get twice the heat rate. Further, our fuel container weighs less in proportion to content.

Compared with Optimus 111 B, the cost is similar, you save 2.7 lbs weight, you get 50% higher heat output and higher fuel efficiency.

Compared with non-pump stoves, you get double the performance, speed of lighting, and reliability in bad weather.

Bugaboo

As the more famous makers go big-time, they have difficulty doing special work. Bugaboo will still make equipment to order.

—JB

Bugaboo Mountaineering
(Makers of Down Equipment)
Catalog

from:
Bugaboo Mountaineering
170 Central Ave.
Pacific Grove, CA 93950

Lightweight Equipment for Hiking, Camping, and Mountaineering

The Potomac Appalachian Trail Club puts out this critical guide to the purchase of various equipment. It explains criteria, gives several sources that meet club standards and gives (now obsolete) prices. Good for beginners, as most equipment catalogs are necessarily self-serving in their opinions.

—JB

Lightweight Equipment for Hiking, Camping and Mountaineering
1972; 78pp.
$1.00 postpaid

from
Potomac Appalachian Trail Club
1718 N. Street N.W.
Washington, DC 20036

Sun Shower

Fill this vinyl bag with 10 qts. of unheated (70°) water, set it in the afternoon sun with the clear side up and the black side underneath, and in three hours treat yourself (and a friend) to a hot (95° plus) shower. The Sun Shower includes a shower head, clip on/off valve, and a heat sensor that changes color when the water has reached 90 degrees—— well designed and well made.

Obviously a dandy item for campers and sailors, at 10 ozs., it qualifies as a "luxury" backpacking item.

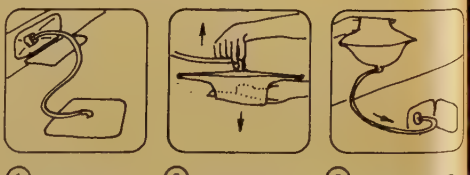
—Andrew Fluegelman

Sun Shower
$6.95 postpaid
from:
Basic Designs Inc.
3000 Bridgeway
Sausalito CA 94965

Simple Siphon
$4.95 postpaid
from:
Basic Designs Inc.
3000 Bridgeway
Sausalito CA 94965

Simple Siphon

Easy to use, just:



This 1½ gallon urethane bag creates its own suction when the sides are pulled apart, so you can siphon liquids regardless of the relative positions of the source/receiver. It is not made for long-term storage or long-distance transport of gasoline (the manufacturers have purposely omitted a shut-off valve on the hose) but it neatly accomplishes the otherwise impossible and dangerous task of trying to siphon gas from one vehicle to another along the side of a highway teeming with traffic. Folds compactly, and comes with a "HELP" sign for your radio antenna.

—Andrew Fluegelman

Sheepherder's Blanket

For wearing, picnicking, or impromptu screwing, this is the best general purpose blanket we've seen.

—SB

Sheepherder's Blanket
$21.00 postpaid

from:
Eddie Bauer
P.O. Box 3700
Seattle, WA 98124

The Down Depot

Where do you get down equipment cleaned without damage? One place with a good reputation is this family co-op.

—JB

Sleeping Bags	$7.75	2-3 week
Standard Jackets	5.25	service

from:
The Down Depot
431 Belvedere St.
San Francisco, CA
94117

Paul Petzoldt Wilderness Equipment

Heavy-duty rather than radical-light, as might be expected from an old-time highly experienced mountaineer. Even heaviest sleeping bag is of Fiberfill II ®, which is heavier than down, but is much better under damp conditions. It'll be interesting to see if these prove to be popular. Catalog has considerable critical comment and is quite instructive.

—JB

Catalog from:
Paul Petzoldt
Wilderness Equipment
Lander, WY 82520

BAJA TENT

The Baja tent is the same design and size as our Expedition Tent, but replaces the ripstop roof with nylon mosquito netting. Of all our tents, the Baja model makes the most ideal warm weather tent. Without the rainfly, you can enjoy the beauty of the night sky while being protected from bothersome insects. With the rain fly in place, you will sleep dry and comfortable in even the most torrential down pours. In addition, the rain fly allows privacy in heavily camped areas.

Weight 8.5 pounds (complete) $140.00

Springbar Tents

We've not actually seen them, but the idea of modular expandable tents is an interesting one.

—JB

Catalog
from:
AAA Tent & Awning Co.
24 West 5th. South
Salt Lake City, UT
84101

Jensen Pack

One of the better new designs featuring 'frameless' construction, yet avoiding that infamous rucksack droop. Rivendell makes a super strong tent too.

—JB
[Suggested by Tom and Spider]

Catalog
from:
Rivendell Mountain
Works
P.O. Box 198
Victor, ID 83455

15

THE CONTRACEPTION CARNIVAL

Balloons emblazoned with Monarch butterflies mating are tied to the trees. Balloons with red and yellow polka dots are being carried around by children. Balloons with sailboats on waves of greenish-blue are skittering above grandparents.

Up close each balloon reveals its false legend: *For the Prevention of Disease Only*.

Camp Crap is having a Contraception Carnival.

The musical strains of *Too Many People* boom out over the festivities through the public address system.

"Guess how many birth control pills are in this jar," invites a pre-pubescent barker, "and win a free trip to the overpopulated land of your choice!"

"Take a guided tour through the Fallopian Tubes," shouts another. "Learn about our reproductive system from the inside!"

Along the midway, gurus and disciples are playing Miniature Frisbee with surplus diaphragms.

There is a dazzling display of costume jewelry designed entirely out of inter-uterine devices and library paste.

An ongoing demonstration of Tantric Yoga keeps turning spectators into volunteers.

A Vasectomies-While-You-Wait stand has no customers at all.

The most popular attraction is *Semenchase*, consisting of several spermatazoa-shaped wheel-carts which can be propelled forward only by repeated pelvic thrusts of the passengers. The first one to reach the goal— a giant replica of an ovum— is declared Fertilizer. Bets are taken on the winner of each race, with all proceeds going to the Oregon branch of the Planned Parenthood Federation.

"I'm sorry to bother you," Primo Columbian is saying to Tongue Fu, "but did you know that you have absolutely no identity?"

"Our computer check," explains Notary Sojak, "indicates that you have no birth certificate; no alien immigration or naturalization papers; no credit cards or charge plates; no bank accounts; no elementary or high school diploma; no university registration; no residence; no telephone or gas and electricity accounts; no validated employment pass or badge; no evidence of treatment at any hospital; no registration with Selective Service; no military discharge; no Veterans Administration number; no Blue Cross or other insurance; no welfare case number; nothing at Internal Revenue; no motor vehicle operator's license; no arrest record; no fingerprints on file; no passport; no Social Security; and not a single membership in any recognized organization."

"But," says Tongue Fu, "I know— who I am."

"And so do I," adds Rosebud Zwalyimeh, who happens to have a can of Emko Foam in her hand, and with its whipped-cream-like contents she reaches up to decorate the top of Sojak's hairless head with a spermicidal peace symbol. "There. That's because you work for people who have a vested interest in the tools of destruction."

When Columbian and Sojak leave, Rosebud says to Tongue Fu, "Well, the Contraception Carnival seems to be an appropriate environment to tell you. I think I'm pregnant. At least my period is late. But I can't be positive whether you're the father— in which case I'd want to have the baby— or if it's Serpento's, in which case I'd want to get an abortion."

"Yet are we not all one?"

"Oh, sure, but some of us are more one than others...."

Flashiebackie:

"I just fucked a man," Rosebud is telling Chocolate Graham, "who has been personally responsible for torturing and killing hundreds of people on the other side of the world. Serpento. I let him seduce me because I was trying to test him. But I still don't know whether to trust him or not."

"Pretended intimacy has a way of boomeranging." says Chocolate. "You know, I started fucking when I was five years old. Pygmies don't have that kind of sexual hangup. After I was kidnapped to America I could see clearly that what keeps this society going is the manipulation of libido."

"But when I told Tongue Fu I'd slept with somebody else, he didn't even mind. Maybe I was testing him too. He's the first man I've gone with who doesn't treat me like private property."

"That kind of monogamy is just another form of kidnapping. Just like dating is a form of prostitution. Hookers simply eliminate all the middle people. The product is sold directly from the factory to the consumer. But, speaking of testing, did you see that anti-evolutionist guy on *TV Ching* the other night, who said that God put fossils on the earth in order to test our faith?..."

"I'm dismayed about the Contraception Carnival," an astrologer is saying on *TV Ching*, "because it's concerned with the quantity of people on our planet, but ignores the quality. Did you know that there is an inescapable correlation between those who are born under the sign of Scorpio and the need to be authoritarian? Now my solution is so easy. All we have to do is promote a universal boycott of intercourse-leading-to-conception for, let's say, only six weeks out of every year, from mid-January to the end of February, and within a few generations Scorpios could be completely eliminated from existence without the necessity of resorting to violence."

The astrologer is followed on *TV Ching* by a naturalist who states: "Although I'm not a Catholic, I am opposed to all forms of artificial birth control on the grounds of health and esthetics. But there is a way of determining precisely when you are ovulating by the simple method of taking your own temperature."

The naturalist in turn is followed by a pair of camp jesters in full harlequin regalia who periodically sit on the twin toilets and engage in snappy dialogue.

First jester: "Say, do you know how they originally discovered what normal temperature is?"

Second jester: "Why, no, but it certainly must be fascinating."

First jester: "Well, first they got five hundred people and they took all their temperatures."

Second jester: "What'd they take their temperatures with?"

First jester: "With five hundred thermometers, silly."

Second jester: "And then what'd they do?"

First jester: "Well, they added up all the temperatures, and then they took an average of all of them from out of the total."

Second jester: "And— you mean?"

First jester: "Yes. It was exactly ninety-eight-point-six."

Second jester: "Isn't technology wonderful?"

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[Continued, page 669]

Basic Rockcraft

Basic Rockcraft *has long been one of the main rock-climbing manuals used by serious climbers—— just as Royal Robbins has long been a name brand climber. He covers the meat of rock work from the equipment and its use through free and aid techniques to ethics and style. Excellent photographs and drawings.*

—AP

Basic Rockcraft
Royal Robbins
1971; 71pp.
$1.95 postpaid
from:
La Siesta Press
Box 406
Glendale, CA 91209
or Whole Earth

JAMMING: It is possible to climb without holds as we normally think of them, by wedging or jamming our body or parts of it in a vertical crack. Of all the free climbing techniques, jamming is the most difficult to learn; first, because it is strenuous and more important because it is totally foreign to our experience. Cling holds are understandable. Here is something one can grab. But jamming must be deliberately learned and fostered.

For ease of understanding we can divide jamming technique into *wedging* and *opposite pressure*. Wedging in its purest form is illustrated by a chockstone in a crack. It is lodged because the walls of the crack are closer to each other below than they are above the stone. The boot or fist can function as a chockstone if the crack is the right width and the narrowing sufficiently abrupt. On the other hand, the human body, not rigid like a stone, is capable of exerting pressure against the walls of the crack sufficient to overcome the pull of gravity even if the crack is wider below than above. Most often the two elements of wedging and pressure will be used together.

Prusiking

Prusiking *is not only the best coverage of this manner of ascending vertical ropes, its the only one! This book is an* absolute must *for any serious climber or caver.*

Sixteen rope and semi-mechanical knots plus 7 mechanical and one motorized ascender are discussed in technical detail giving methods of setting up, using, and the advantages and disadvantages of each in the first part of Thrun's book. The second part covers ropes, and the pros and cons of each type, their selection and use. Very thorough. In the final part Thrun goes into 19 of the best prusiking systems in vogue describing the hardware necessary, the most efficient method of execution and the advantages of each.

—AP
[Suggested by Allan P. Haern]

Fig. 51. The Texas prusik method. A sitting position is the start of the cycle (A). It provides a convenient rest position. The legs are raised and the lower knot is moved up (B). The climber then transfers his weight to his feet and loosens his top knot (C). He stands up and pushes the top knot up (D). He then sits down and starts the cycle over at (A).

Prusiking
Robert Thrun
1973; 75pp.
$4.50 postpaid
from:
National Speleological Society
Cave Ave.
Huntsville, AL 35810

Prusiking owes its birth and name to Dr. Karl Prusik of Austria, who first described how the knot that now bears his name could be used for climbing a rope (Prusik, 1931). The knot was not entirely new. Similar sliding hitches had been used before in other applications, but it was Prusik who inspired later mountain climbers and cavers. His name has, by common usage, lost its capitalization and become successively an adjective, an adverb, a verb, and a noun.

Forrest Mountaineering

High Quality climbing gear—— hammers, nuts, packs, slings, hammocks, etriers, and more. One item to check out is the Pin Bin—— keeps that hardware in handsome order and handy.

—AP

Catalog
from:
Forrest Mountaineering
Box 7083
Denver, CO 80207

Pinbin-Bandolier $6.95

Off Belay

General Purpose climbing magazine covering the whole scene of mountaineering—— history, mountains, equipment, technique, and news. Comes close to being the only U.S. mountaineering periodical of real merit.

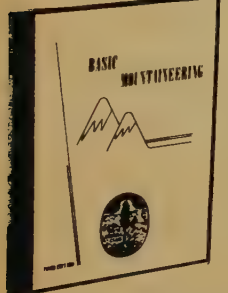
—AP

Off Belay
Ray Smutek, Ed.
Bi-monthly, 60pp.
$6.00 /yr
from:
Off Belay
12416-169 S.E.
Renton, WA 98055

Basic Mountaineering

This book grew out of the vast number of lectures given by the Seattle Mountaineers in their training courses, and as such has a "quick," right-to-the-point presentation—— very little filler. Arrangement is in annotated outline form with line drawings—— Major emphasis is on traversing mountainous terrain, i.e., hill walking and climbing, both in summer and winter. Has a very good first aid section. Recommended as a good first book to buy if you plan to get into backpacking/climbing activities in mountainous areas. There's about $9.95 worth of information in this $2.50 book.

—AP



Basic Mountaineering
Henry I. Mandolf, Ed.
1972; 136pp.
$2.50 postpaid
from:
San Diego Chapter
Sierra Club
Box 525
San Diego, CA 92112

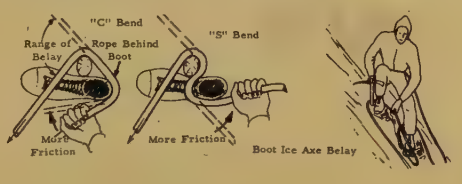
Blisters: Sore or blistered feet are one of the frequent nuisances which plague the climber, particularly the novice.

Blisters are caused by a chafing action between the foot and the sock, particularly at the heel. Wearing a thin pair of slippery nylon, silk or even cotton socks under the woolen pair is a recommended practice. Remove any wrinkles in socks. Wearing properly fitted socks and shoes will eliminate most blisters. New boots should be broken in before an outing. Walking downhill with loose boots creates misery by hitting toes and rubbing heels. If your boots are loose, you may correct the problem by using an additional pair of socks, by better lacing, or by using inner soles.

At the first feeling of hot or sore spots on the foot, stop immediately and apply a patch of moleskin or plain adhesive tape. Don't let the irritation continue without protecting the skin; otherwise your misery will hold up the whole party. If a water blister forms, prevent breakage if possible; do not puncture or attempt to drain the blister. The skin over the unbroken blister helps keep infection out.

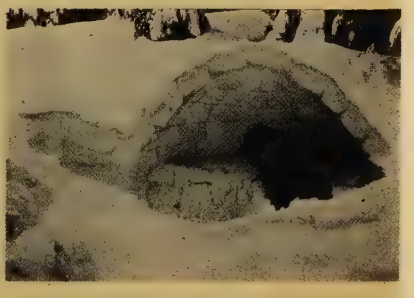
Cover the water blister with a piece of moleskin in which a hole has been cut for the blister; then cover the area with a strip of adhesive tape or moleskin. Should the blister break, wash the surrounding area and blister with soap or phisohex and water, cut away the loose skin and again cover with moleskin "doughnut" and adhesive tape.

Take advantage of extended rest stops by removing the boots and massaging the feet; changing socks will give a refreshed feeling. Keep feet and socks clean, and shoes free from small stones and sand.



Cutting the blocks is one of the two tricky aspects of igloo building. Simple as pie if done correctly, a disaster if not. The key is to truly cut the block free, and not to pry on it, or try to break it free.

Begin by making the long vertical cut. Use a sawing motion, and do not force the knife. Once inside the igloo circle, this cut may be several blocks long. It's best to go through several times to make sure the cut is a full blade deep.



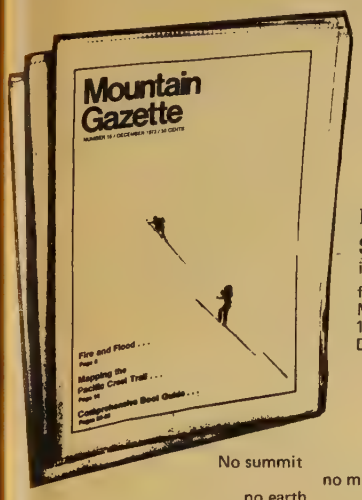
Next make the two, short axis, vertical cuts. But use your hand as a depth stop. If you go in too far and nick the next row, blocks cut from it will break at the nick. These two cuts should taper outward very slightly, so that the block will tilt out without catching on the edges.

The final cut frees the bottom edge. If everything has been done properly, the block will settle with a dull "thump," as it comes free. No thump means that somewhere the cut is incomplete. Trying to pry the block out will only break it. Recut all edges.

Mountain Gazette

A fine periodical with nice range—— skiing, climbing, ecology, travel, people. Good feeling and good sense and doesn't kill you with gloss.

—SB



Mountain Gazette
$5.00 /1 yr
in US & Canada
from:
Mountain Gazette
1801 York St.
Denver, CO 80206

No summit
no mountain
no earth
only
three shadows
walking
on top of
mother of pearl
clouds
no climbers
no climb
no victory
no defeat

Throughout the U.S. of A. the fine art of mogul skiing has been reduced to numbered paintings by short skis and their riders. Those skiers not ready to join this crazed fad are getting into off-trail and edge-of-trail skiing. Normal size skis have become almost a trademark of the underground, though I'm not sure that every skier on normal length skis would wish to be identified with the underground.

Beware of shortee skis, my friends. Beware of great deals. Beware of the easy. Beware of industry. Beware of Richard Nixon. They will not take you *exactly* where you want to go; and their speed is only in diverting movements, not in velocity. They will plateau you.

And there is no joy there. No joy.

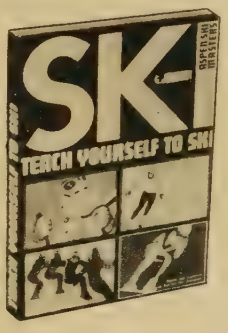
—Dick Dorworth

Teach Yourself to Ski

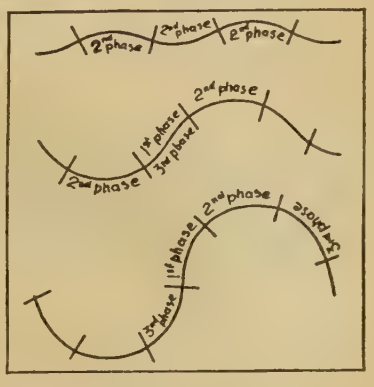
The author is one of the best ski technicians around and has recently been hired as coach of the French Ski team. He taught Patrick Russell how to race and ski fast, etc.

The book is a good way to get around the expense of ski instructors lessons. As the author says, something self-taught is remembered much longer. It was published in 1970, so it is a bit dated with respect to recent changes in ski technology, such as the trend to short skis, trick skiing and graduated length ski teaching but the material is presented in a great format with sections and teaching sections.

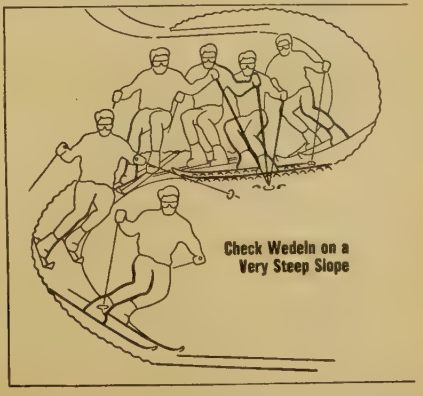
—Graham Sudberry



Teach Yourself to Ski
Georges Joubert
1970; 202pp.
$6.95 postpaid
from:
Aspen Ski Masters
P.O. Box 3071
Aspen, CO 81611
or Whole Earth



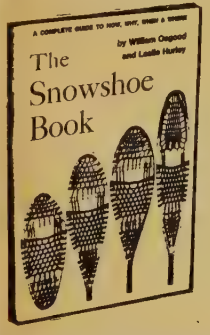
Three parts of a turn can be distinguished, that is, if the turn is complete enough: The first third, which follows the initiation and which approaches the fall-line, the second third, the fall-line phase, and the third phase which we call the completion of the turn. Your skis are not subjected to the same forces during these three phases: 1) In the first third, centrifugal force, which pushes you to the outside of the turn, is in part neutralized by the resultant of gravity which pulls you downhill, thus toward the inside of the turn. . . Due to this fact, you do not have much difficulty holding, and there is little risk of sideslipping or slowing down, except if your initiation was too powerful and your skis ended up crosswise to your trajectory. 2) In the second third of the turn, obviously you must resist centrifugal force, but you also feel a considerable forward acceleration which helps to hold your skis in the arc. This acceleration is due to two causes. First, because of the fact that the slope followed by your skis, fairly flat in the beginning (in the traverse) increases until the fall-line. Next, because the resultant of gravity, which pulls you downhill, is exerted in a direction close to that of your displacement. 3) In the third phase of the turn this is no longer true as the resultant of gravity which pulls you downhill adds its effect to that of centrifugal force in increasing your sideslip. The braking effect of this sideslip is even greater because your skis move from a maximum slope (the fall-line) to a lesser slope (your traverse). This explains the greater difficulty in controlling the last third of the arc of your turns without sideslipping. You will notice this difficulty especially when the snow conditions are difficult (ice, powder, among others) and when you must shorten the radius of a turn as you complete it. It is quite obvious that for turns which do not leave the fall-line very much, the first and the third phases practically disappear and the problems posed by such turns are essentially those posed by the second phase of a completed turn.



The Snowshoe Book

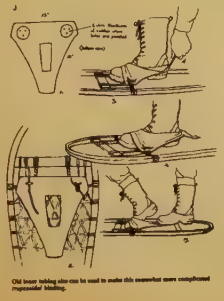
Excellent guide to snowshoeing! Well illustrated with drawings by Grace A. Brigham. Pertinent info on showshoe types & uses, bindings, extra equipment & technique, also sections on racing and games plus survival including first aid, avalanches & rescue. Something in here for everyone whether novice or expert.

—AP



The Snowshoe Book
William Osgood &
Leslie Hurley
1971; 128pp.
$3.95 postpaid
from:
The Stephen Greene Press
P.O. Box 1000
Brattleboro, VT 05301
or Whole Earth

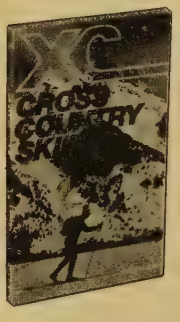
The cardinal rule of snowshoeing technique is to remember to pick up the foot to be moved ahead *over* the edge of the stationary foot and to move this foot far enough *ahead* so it won't encumber the stationary foot. . . . Likely somewhere along the way the beginner will take his first spill into the soft, deep snow and wonder how on earth he will ever get back on his feet again. Here the pole will come in handy for, if one can touch bottom so to speak, the pole can be used as a vertical prop. . . . If the snowshoes seem hopelessly snarled and the snow bottomless, the bindings can be unhitched, the snowshoes taken off and set in a good position to use as a platform to get back on your feet again. Don't thrash around needlessly. We should all take a tip from oxen who lie quietly while their drivers arrange for them to get back on their feet, unlike horses who often get panicstricken after a fall in the deep snow.



XC Cross Country Skiing

A nice little book with the real flavor of cross country skiing. Written by contributing authors, it starts off with a thorough coverage of the history of the sport and proceeds to chapters on getting in shape, nordic techniques, equipment evaluation and use, and where to ski tour around the U.S. including sources of maps. John Caldwell, who authored the section on waxing (also author of The New Cross-Country Ski Book *Pg. 270) did a particularly good job. For the price, this book's a bargain.*

—AP



XC Cross Country Skiing
Rob & Marcia Chickering,
Anne Hicks, Eds.
1972; 160pp.
$2.00 postpaid
from:
XC
Tobey Pub. Co.
Box 428
New Canaan, CT 06840
or Whole Earth

Tubbs Snowshoes

Tubbs makes the Cadillac of snowshoes; made of bent New England hardwoods and rawhide—— Sierra Designs sells 'em, too.

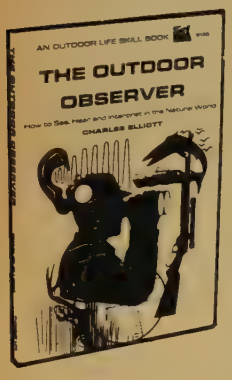
—David Sowd

Vermont Tubbs, Inc.
18 Elm St.
Wallingford, VT 05773

The Outdoor Observer

An educational, as well as an interesting book written in narrative style on ways to develop your sense of awareness of game in the field through sight, sound, and smell—— Elliott recounts his experiences with experienced guides, and woodsmen, as well as his own successes and failures in attempting to learn the secrets of being a keen observer. A fun book with a good deal of practical information.

—AP



The Outdoor Observer
Charles Elliott
1969; 119pp.
$1.95 postpaid
from:
Outdoor Life
E.P. Dutton & Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth

For more precision sighting, sharpen focus of your binoculars carefully, and brace them on a log or some other solid object.

An ornithologist, when he wants to observe a certain bird, or to determine the number of species or individuals in an area, wets the skin on the back of his hand with his lips and sucks against the skin to make a squeaking sound similar to that made by a mouse in trouble. Usually every creature within sound of the squeak will come over to investigate it.

•

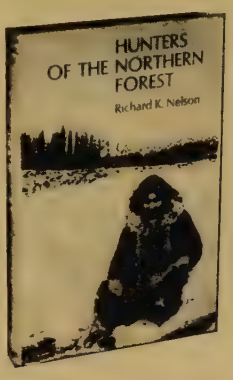
I am certain no one has ever tried to list every sound he recognizes in the outdoors. . . . One of the ways I have found to train this particular sense is with a tape recorder. After I have been in a spot long enough for the creatures to begin to stir around me, I turn the recorder on and forget it. While it is recording, I try to make a list of every note I hear. Later I compare the tape and notebook and am often surprised that while I was busy concentrating on one sound, the recorder was picking up others that I overlooked.

Hunters of the Northern Forest

A well written study of the Alaskan Kutchin Indians and their life style, with particular emphasis on their techniques of hunting, fishing, and living in the Alaskan wilderness.

Hunters *has a unique value as a "how-to" book for the outdoorsman interested in survival and homesteading anywhere in the forested regions of the northern US or Canada. (See also* Hunters of the Northern Ice, *Pg.* 271*).*

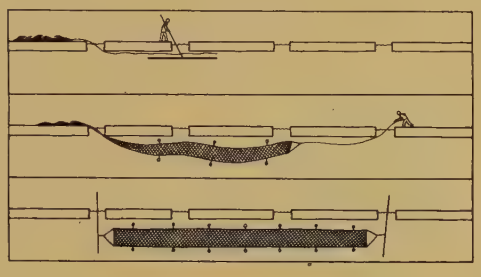
—AP



Hunters of the Northern Forest
Richard K. Nelson
1973; 339pp.
$10.50 postpaid
from:
The University of Chicago Press
11030 South Langley Ave.
Chicago, IL 60628
or Whole Earth

The Indians have a characteristic way of building fires. They always lay the sticks and logs parallel, so that they burn in the middle but their ends extend beyond the edge of the flames. When the middle of the log burns away, they push the pieces inward from both ends to rekindle the blaze. This technique minimizes the amount of woodcutting. Fairly long pieces of wood can be placed on the fire, and when the flames "cut" them the two halves are put back onto the fire to be halved again.

•



This cross-sectional drawing illustrates the method of setting a fishnet under the ice.

•

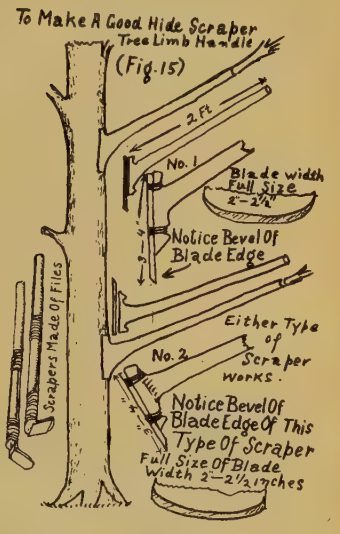
Sometimes animals are more clever than men about foreseeing changes in the weather. Muskrats, for example, are able to anticipate cold weather in the springtime. One to three days before a cold snap they start plugging and relining the walls of their little houses or pushups with mud and vegetable matter. Men who open these houses to set traps anticipate cold weather when they see fresh lining inside.

The Indian Art of Tanning Buckskin

The first of a series of books designed to systematically develop the skills one needs to become adept at fashioning a completely independent lifestyle from the abundant wilderness environment. Indian Art of Tanning *covers the complete technique from properly skinning the animal to the final smoking process. Also included are methods of making your own fleshing and scraping tools, and neatsfoot oil if none is available commercially. A fantastically usable book. After reading this one you'll probably want to get the next two in the series:* How to Make Buckskin Clothing and Footgear *and* How to Make Survival Weapons, Snares, and Traps. *(These are being printed now. For prices and availability check with the publisher; address below).*

—AP
[Suggested by Ralph C. Frese]

The Indian Art of Tanning Buckskin
A. F. Schaefer
1973; 56pp.
$2.95 postpaid
from:
Schaefer-Knudtson Publications
Box 250
Roseburg, OR 97470
or Whole Earth



"Fist" the hide off. This means pulling the hide with one hand and with the other hand pressing between hide and flesh with the fist. This avoids most scoring. Of course where the hide is "grown fast" cutting is necessary, with the edge of the blade turned slightly away from the skin to avoid cutting into it.

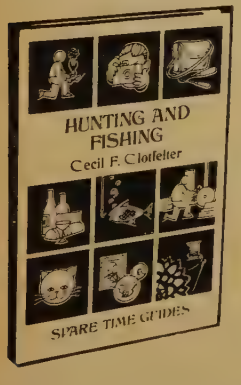
•

Thoroughness of this wringing job is the secret of making good soft buckskin. The water is squeezed out, leaving the fine fibers of the hide damp and open, to soak up the brain dope. Nothing will equal the brain-mash for a skin-dressing, to make soft buckskin. This is peculiarly an American Indian method not used by anyone else, and explains the superiority of "Indian tan."

Hunting and Fishing

A good annotated list of the several hundred better books and magazines currently available on hunting, fishing, firearms and archery, plus national organizations, publishers of outdoors books, and manufacturers and suppliers.

—AP



Hunting and Fishing
Cecil F. Clotfelter
1974; 118pp.
$7.50 postpaid
from:
Libraries Unlimited, Inc.
P.O. Box 263
Littleton, CO 80120
or Whole Earth

140. Walker, Ralph T. **Hobby Gunsmithing.** Northfield, IL., Digest Books, 1972. 320p. illus. $5.95pa. LC 72-86644. ISBN 0-695-80361-1pa.

Hobby gunsmithing is much like home doctoring; there are many things the amateur can do for himself at low cost, and then there are other matters that require the services of a trained gunsmith or doctor. Critical surgery—— the rebarreling or rechambering of a high pressure rifle—— requires skill and precision, but refinishing, rebluing, restocking, and a myriad other tasks can be done by the amateur craftsman, with excellent results. The author, a trained, experienced gunsmith, explains many of the "mysteries" of gunsmithing in simple, clear, easy-to-follow instructions. Almost anyone with the interest, a few tools, and effort can do a creditable job, perhaps amazing even himself with the high-quality results.

•

Gunsmith Supplies, Tools, Services

Alamo Heat Treating Company
Box 55345
Houston, TX 77055

American Edestaal, Inc.
1 Atwood Ave.
Tenafly, NJ 07670

B-Square Company
Box 11281
Ft. Worth, TX 76110

Brown & Sharpe Mfg. Co.
Precision Park
North Kingston, RI
02852

Bob Brownell's
Route 2
Montezuma, Iowa 50171

Maynard P. Buehler, Inc.
17 Orinda Highway
Orinda, CA 94563

Christy Gun Works
875 57th St.
Sacramento, CA 95819

Clymer Mfg. Co.
14241 W. 11 Mile Road
Oak Park, MI 48237

Forster Appelt Mfg. Co., Inc.
82 E. Lanark Ave.
Lanark, IL 61046

Gopher Shooter's Supply
Box 246
Fairbault, MN 55021

H & M
24062 Orchard Lake Road
Farmington, MI 48024

Paul Jaeger, Inc.
211 Leedom St.
Jenkintown, PA 19046

Frank Mittermeier
3577 East. Tremont
New York, NY 10465

Redford Reamer Co.
Box 6604
Redford Hts. Station
Detroit, MI 48240

Richland Arms Co.
321 W. Adrian St.
Blissfield, MI 49228

Ruhr-American Corp.
South Hwy. No. 5
Glenwood, MN 56334

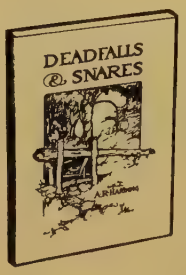
L.S. Starrett Co.
Athol, MA 01331

Williams Gun Sight Company
7389 Lapeer Road
Davison, MI 48423

Deadfalls & Snares

One of Harding's old line books for the trapper, with a wealth of information on constructing, setting, and camouflaging all kinds of traps. Includes good information on skinning and treating pelts.

—AP



Deadfalls & Snares
A.R. Harding
1935; 218pp.
$1.50 postpaid
from:
A.R. Harding Pub. Co.
2878 E. Main St.
Columbus, OH 43209
or Whole Earth

LIFTING POLE SNARE.

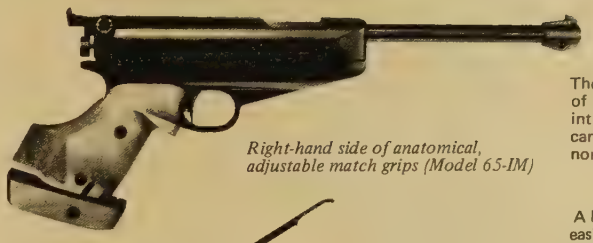
Beeman's Airgun Source Book/Catalog

Air Rifle Headquarters

Grownup's air guns. A far cry from the two-dollar Daisy, these guns serve the same purpose as a 22, only they do it cheaper and quieter. The European spring-action requires no repetitious pumping, fires the same each shot, and is a lot quieter than a pump-it-up or CO^2-type. Most guns shown in these catalogs are of remarkably high quality. Prices range from about $40.00 for an all-purpose pistol to more than $400.00 for a match rifle.

—JB

[Suggested by Alberto Robles]



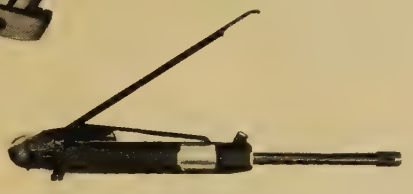
Right-hand side of anatomical, adjustable match grips (Model 65-IM)

Airgun Source Book/ Catalog
1974; 83pp.
$1.50 postpaid

from:
Beemans Precision Airguns
Box 278
San Anselmo, CA 94960

Air Rifle Headquarters/ Catalog
$1.00

Air Rifle Headquarters Inc.
247 Court St.
Box 327
Grantsville, WV 26147



One easy swing of the side-lever simultaneously opens and cocks this elegant gun.

Airguns are not subject to the Gun Control Act of 1968 or most other repressive gun laws. There are usually no purchase or ownership problems. Normally you can ship them, mail them, and take them across state and even international lines when traveling and vacationing. . . .Even top grade pellets only cost about $2.00 per 500; the savings over even .22 caliber cartridges would pay for a fine, precision airgun with only 10 to 20 tins of pellets. . . . Human Scale: Finally, the more you use a precision, adult, airgun, whether it be to fill the pot or punch targets, or both, the more you may gradually come to realize that here is an arm that is scaled to human sensitivities and perception. This is not easy to define, but it seems that here is a tool that rewards your skill, intelligence, and precision with its own precision and a lack of unnecessary power and disturbance. The intelligent reader will find it intriguing to expand this concept.

•

European spring airguns are generally the design-of-choice of airgun experts. These arms which release a spring-loaded piston to compress air at the moment of firing usually have a number of inherent advantages over pneumatics or CO^2 guns which release previously compressed air or gas:

MUCH QUIETER	NO PUMPING
MORE ACCURATE	NO CO^2 BULBS
MORE EFFICIENT	NO VALVES
MORE VELOCITY	LESS REPAIR

•

Spring airguns are much faster and easier to charge. A single stroke cocks their piston spring. In the sporter models this single stroke will produce more velocity than the several pumps which pneumatics require. It seems amazing that such a stroke can generate more striking force than up to 20 pumps in a Daisy Powerking 880 or a Crosman 760. A single stroke that took less cocking force than one of the last strokes of the pneumatic guns.

•

The incredible accuracy of European precision airguns is one of the biggest surprises for persons who have just been introduced to them. Only a very few of the finer firearms can begin to approach the accuracy of the top airguns at normal airgun distances.

•

A little imagination and you can supply a whole range of easily obtained, inexpensive plinking targets: Neccos, Life savers, tiny candy hearts, dry clay balls, hard white mints, soup crackers, etc. all give a satisfying disintegration when hit.

•

The use of airguns for small game hunting depends largely on knowing what is happening at the point of impact. Information from the ballistics section of this publication can be useful, but it must be extended to field distances. It would seem at first that the more power that you could deliver to the live target the better. However, this is only partially true; the most important thing is to deliver the pellet exactly. When working with airgun energy levels a well-placed head shot is called for on most game.

•

Pest Chasing: Pest elimination can be considered with small game hunting, but pest chasing is a different matter. Here you may be trying to rout orchard-wrecking deer or annoying dogs without really injuring them. Study the extended range ballistic tables carefully. A low velocity air rifle or, much better, an air pistol is called for. Use light, flat headed pellets to prevent penetration. Experiment by shooting at a grapefruit, potato, or the like at various distances to be sure you are not going to cause cruel wounds. For chasing small pests a Yewha air shotgun loaded with rice, etc. may be useful.

NOMADICS

Good Tools That Shoot

See Pg. **276**, *good letter.*

Log Cabin Sport Shop Catalog

A fat collection of muzzle loading weapons, and the parts and supplies to make your own. If you think muzzle loaders are silly, ask a man who owns one why he doesn't just buy a Winchester and be done with it. POW!

—JB

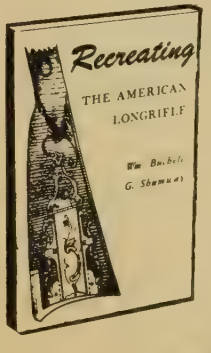
Log Cabin Sport Shop Catalog
96pp.
$1.50 postpaid
from:
Kindig's
P.O. Box 275
Lodi, OH 44254

HAMM LOCKS

Recreating the American Longrifle

A very complete treatise on the history and construction of this type of weapon. Detailed instructions for creating your own version. All presented by men who know and love their craft. Includes chapters on embellishment.

—JB



Recreating the American Longrifle
Wm. Buchele and G. Shumway
1966; 190pp.
$6.50 postpaid
from:
George Shumway Pub.
R.D. 7
York, PA 17402
or Whole Earth

You might pretend that you were a young Pennsylvania gunsmith who finished his apprenticeship about 1812 and then spent the war years in Philadelphia doing contract work. The gunsmithing business suffered a depression after the war so you decided to go adventuring by shipping out on a whaling voyage to the Pacific. In the course of your travels you put in at one or more places along the northwest coast and became enchanted with the Indian art you saw. You brought abalone shells home with you as well as some examples of the Indian art. And after you returned home you built a couple of rifles utilizing this new art. Though it didn't happen, it could have.

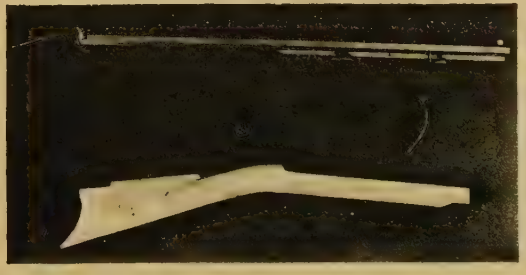
•

In the making of rifle barrels there are two parts of importance to consider—— the inside and the outside. Only the inside shoots, of course, but the external form of the barrel seriously affects the quality of the rifle, i.e. how well it holds, balances, points, and looks.

Green River Rifle Works

Finished, semi-finished, and basic kits for the Sam Hawken rifle (kit $195), Leman trade rifle (kit $130), and Squirrel Rifle (kit $130), all authentic copies of original muzzle-loading guns. Beautiful. They have a long waiting list.

—Kathleen Whitacre
[Suggested by Mad Tom Metour]

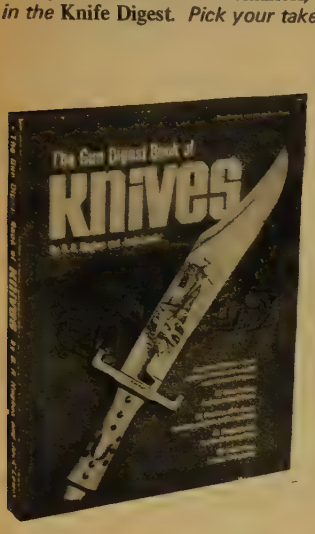


Brochure free
from:
Green River Rifle Works
Roosevelt, UT 84066

KNIFE BOOKS

Three overlapping books on knife use, knife making, and custom knives. There's more introductory practicality in **The Gun Digest Book of Knives** *[suggested by Steve Sanfield]; more beauty and clarity in* **Knives and Knifemakers**; *and more gossip in the* **Knife Digest**. *Pick your take.*

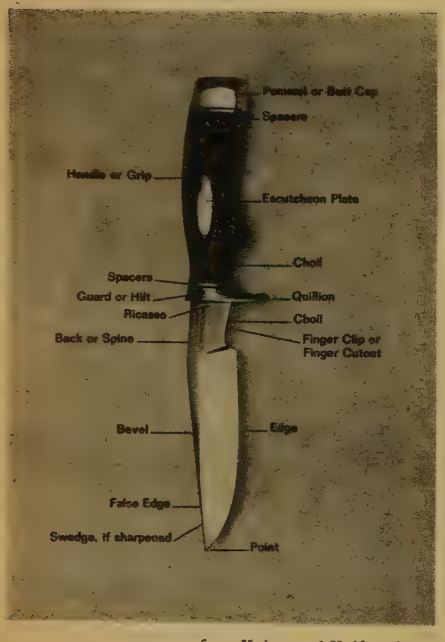
—SB



The Gun Digest Book of Knives
B. R. Hughes and Jack Lewis
1973; 288pp.
$5.95 postpaid
from:
Digest Books
540 Frontage Rd.
Northfield, IL 60093
or Whole Earth

Knives & Knifemakers
Sid Latham
1973
$4.95 postpaid
from:
Macmillan Pub. Co., Inc.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

Knife Digest
William L. Cassidy, Ed.
1974; 289pp.
$5.95 postpaid
from:
Knife Digest Pub. Co.
Box 4310
Sather Gate Station
Berkeley, CA 94704
or Whole Earth



from **Knives and Knifemakers**

Accessories to aid in keeping an edge on your knife. Honing steels are by Gerber and Schrade-Walden. The long thin rod is a Moon Stick by Case, an excellent tool for quick touchup. The large white sharpening stone is a Washita/Soft Arkansas stone, and the large black one is the Surgical Black to be used as a final touch for razorlike sharpness. The loupe is for examining the blade edge. Russell's oil may be purchased quite inexpensively in large cans.

Knives. . .

As far as economics are concerned, there are two distinct types of knives: the "custom" knives hand-crafted by various makers in virtually every corner of the country, and the "commercial" knives mass-produced by established cutlery firms.

A properly maintained "custom" knife will last longer than its owner, and is a thing of beauty and a joy forever. The average mass-produced knife is just so much worthless garbage.

Getting down to specifics— in tests conducted for **Knife Digest**, we found that the widely advertised Buck knives were brittle, subject to frequent breakage, and on the average poorly made. All other factory produced knives fared little better with the notable exception of Gerber knives, which we found to be made from superior steels, well designed, and carefully crafted. With regard to pocketknives, we found no mass-produced example worthy of more than passing notice, with the possible exception of certain isolated examples from the Schrade-Walden line.

Turning our attention to the "custom" knives, we ran head on into the common argument, "Custom knives are so damned expensive!"

While the initial investment involved in purchasing a hand-made knife may be difficult for some, this expense is more than offset by the fact that such a knife will be superior to its mass-produced relative in virtually every fashion imaginable. To be sure, there are some rather poor hand-made knives about, but they represent only a small minority of the total out-put.

Of all knives available in the United States today, we found the Morseth line represented the "most for your money;" the Loveless line to be the all-around "best;" the Horn line to have the finest folding knives, and the knives made by D.E. Henry to be the only "perfect" examples of the knifemaker's art we have ever encountered.

Morseth knives start at around fifty bucks and boast rapid delivery. Loveless knives start at $150.00, and often take more than a year to be produced. Horn knives begin at $100.00 and are slow in coming, while the knives made by D.E. Henry start at $250.00, and will take every day of three years.

Information regarding any of these knives may be had from A.G. Russell (who manufactures the Morseth line) at the following address:

Russell's
1705 Highway 71, North
Springdale, AR 72764
(501) 751-7341

Russell also supplies the justly famous "War Eagle" brand Arkansas sharpening stones. A single experience with these "natural" stones is enough to convince even the most prejudiced knife user that synthetic stones are the sole province of greenhorns and idiots.

William Cassidy, Editor
Knife Digest Publishing Co., Inc.
Berkeley, CA

FALCONRY

by Stephen J. Bodio

When the last Catalog came out I was pleased and surprised to find my own secret pastime, the "ancient and honorable profession," Falconry, included. However, I was dissatisfied with the book and pamphlet list there. As it was the last Catalog I didn't write but now that I see you are publishing an Epilog I have decided to give you a few strong opinions. This may seem overly long for such a non-essential pastime; however I believe in falconry as an unusual, unique, and active interface with nature. I can think of no other "sport" in which such an intimate and long-sustained interaction with a *wild* creature exists.

Criticisms, as follows:

1. T.H. White's **The Goshawk**— I would certainly leave this in— it is a beautiful book and the only one on what might be called the psychology of hawking. But I might add *never* to use it as a manual. H.A. Evans (of whom more later) called it "an account of what *not* to do when training a hawk."

2. A fine book for the experienced falconer is E. B. Michell's **Art and Practice**. But it is emphatically not for the beginner. It has little on the (absolutely necessary) equipment needed.

And Stuart— its worst point is that it fails exactly where you recommend it; in many ways it is outdated. After you have mastered the basics it is fine reading, but even its area of greatest concentration— the flight at Larks with merlins has no modern American counterpart.

3. Stromberg's— a bad idea! (at least for falconers). The Falconer's association apparently had to put pressure on them to make them quit publishing falconer's names and addresses without falconer's consent. Even without this complaint the exotic pet trade is an evil and vicious ripoff. This has been extensively documented. Hawking gets enough bad publicity— this even in responsible publications such as **Natural History**— that we simply cannot afford association with anything as sleazy or anti-conservation as the exotics trade. A falconer should trap (legally!) his own birds, or perhaps in the future breed them which leads into:

4. Breeding. Stuart, you said "If enthusiasts would buy (ouch) and breed hawks instead" . . .

Well. . . we're trying. But breeding is a *very* new, very uncertain game at present. (Cornell University has the only large, consistent, breeding project. It is having phenomenal success with peregrines and other large falcons. However very few backyard setups are succeeding yet. The space, time and knowledge are beyond the resources of all but a handful of falconers, even if there were no legal obstacles. (There are, both state and federal.) Also, there are problems as yet unsurmounted, in getting wild caught adults— which virtually all "bought" hawks are— to breed. I know a game warden, an excellent falconer of fifteen years experience who is entering his third unsuccessful year with a breeding project composed of such birds— and few hawkers have the discipline to keep their hands off a fine healthy pair of birds for three years— myself included!

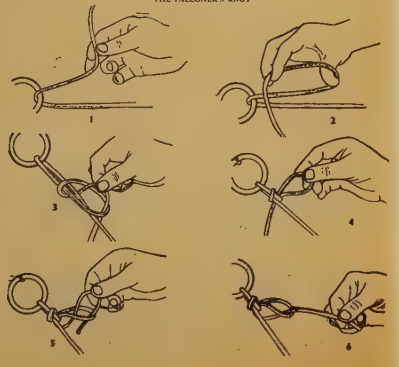
As it stands no one without a lot of experience should try a breeding project with any but the commonest birds. They are too vitally needed as wild breeding stock. Trap, fly, release might be a far better idea for rare birds, so that they are not long removed from the breeding population.

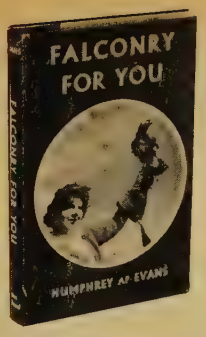
Enough bitching! a few positive suggestions in the way of books:

1. The only basic book I like that is also cheap is a recent, British book, **Falconry For You** by Humphrey Ap Evans, 1960; 206pp., $4.95, from: Charles T. Branford Co. 28 Union St., Newton, MA 02159, or Whole Earth.

Over the years a cunning knot has been evolved, now dignified by the name of the falconer's knot. It is nothing sensational, but it does work. It is very essential to learn it and use it for all hawking occasions. In addition, it is extremely simple. With one hand it is tied. With one hand it is instantly undone. The hawk, secured by this knot, is permanently safe.

Do not try to invent another knot. This is the quickest and simplest. Constant tugging by an angry hawk can undo most others, if they are not to be so complicated as to require two hands to undo.

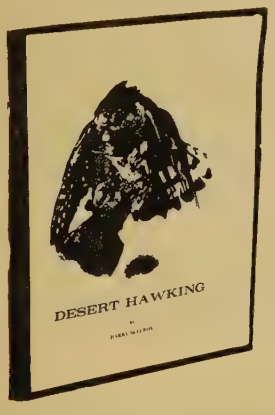




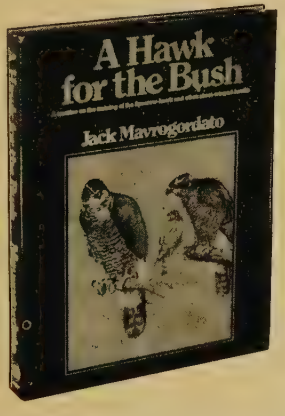
This book neither makes hawking seem too easy, nor shrouds it in a medieval mystique. It is remarkably thorough and has an excellent Bibliography of other hawking books. It is also pretty good on basic "furniture."

2. **Desert Hawking** by Harry McElroy, 1974; 113pp. $10.50 postpaid, from Harry McElroy, Box 896, Tuba City, AZ 86045 or Whole Earth.

This is very modern, a bit crazy, and very, very useful. Everyone I know who flies the "shortwings" has learned something from it. It is somewhat regional but don't be misled— I know someone in Maine, who swears by it. Not exactly basic, though. And completely un-traditional.



3. **A Hawk for the Bush**— Jack Mavrogordato, 206pp., $12.50 postpaid from, Clarkson N. Potter, Inc., 419 Park Ave. South, New York, 10016. Or Whole Earth. *The* modern classic. This is beautifully written, dense with information, philosophical, and opinionated. It contains the last plates by the great British hawk painter Lodge.



This is not exactly a beginners book but it is so painstaking a beginner can profit.

With these, *plus* White, a start can be made. But no one should ever try to learn hawking from books only. He will only kill hawks that way. Bust your ass if necessary, but find a working falconer and listen. Remember falconry has a 4000 year tradition, mostly based on good practical knowledge. If you are tempted to experiment, nine times out of ten you'll end up going back to the original way. You have to be very good before you can depart from the traditional (like McElroy) and still get results.

Hawks must hunt. Keeping a confined pet hawk is not falconry, or natural.

Go lightly. Remember; better a lost (free) hawk than a dead one.

Learn raptore conservation, and predator-prey ecology.

A good paperback— John and Frank Craighead's **Hawks Owls and Wildlife** , $3.75, Dover Pub., Inc., 180 Varick St., New York, NY 10014. Or Whole Earth. All falconers must be conservationists today.

I'll be glad to answer any questions, and hope this is of use. I hope falconry makes it to the epilog. It's older than our culture, and may well survive it.

PROSPECTING

by Mack Taylor

The old prospector has become nearly extinct in the last couple of decades— replaced by teams of well-equipped geologists with corporate backing. These people are finding ore deposits at as high a rate as ever, but nearly all the discoveries could have been made as easily by a dedicated amateur. How? The prime ingredients are: 1. A strong desire to find an ore body, 2. An equally strong attraction to living and working out-doors, and 3. The willingness to do a careful, thorough job both in the library and in the field. Professional training and equipment are helpful but no substitute for native drive and liking for the work. The rewards can be quite handsome.

Nearly all countries have geological surveys or ministries of mines that put out useful publications on the mineral resources and geology of their region. Most also have professional staffs that are interested in helping any amateur that comes along. In the U.S., the people to see are the state geological surveys (or bureaus of mines) which are usually in the state capitol or major city. Prospectors being uncommon these days, they'll probably give you a big welcome. They all have collections of minerals and rocks which you can study and learn to identify. The U.S. Geological Survey also has 3 regional offices with knowledgeable geologists at hand and a complete library of their publications (Denver, Colorado; Menlo Park, California; Reston, Virginia).

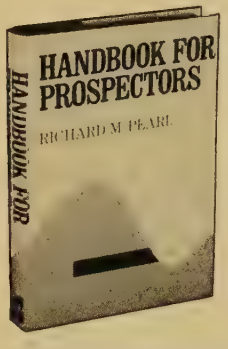
As a starter, here are two first-class guides to hang out with:

Summer Gold
John N. Dwyer
1971; 72pp.
$1.95 postpaid

from:
North Star Press
P.O. Box 451
St. Cloud, MI 56301
or Whole Earth

Definitely gives you a feel for the work and the life. An interest-whetting account of the art of prospecting, including where to go, the tools, and sources of information.

A very simple set of prospecting tools: Pack, electronic metal finder, gold pan, safety hat, pick, compass, chisels or gads, prospect hammer, magnifying glass, horseshoe magnet, D-handle shovel, pry bars. All of these tools are easily packed and carried by one man.

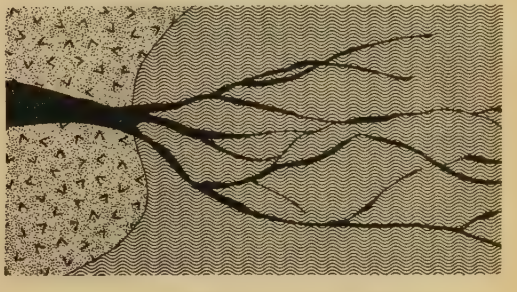


Handbook for Prospectors
Richard M. Pearl
1954, 1973; 472pp.
$14.50 postpaid
from:
McGraw-Hill Bk. Co.
Princeton Rd.
Hightstown, NJ 08520

Manchester Rd.
Manchester, MO 63011

8171 Redwood Hwy
Novato, CA 94947
or Whole Earth

A well-written, comprehensive manual covering every aspect of the subject. This is an adaptation of von Bernewitz' classical treatise, brought up to date by a man thoroughly steeped in the field. Prof. Pearl has authored a long list of probably the most popular books on mineral collecting, prospecting, and amateur geology. This seems to be his magnum opus.



A thick vein may be split where it enters a weaker rock, as at Freiberg, Germany.

Treasure Hunter's Manual

Generally accepted among initiates in the treasure hunting fraternity as the definitive work on the subject. Half of the book is jaw, half good hard core info.

—AP

Treasure Hunter's Manual
Karl von Mueller
1972, rev. 7th ed; 293pp.
$6.50 postpaid
from:
Ram Publishing Co.
P.O. 38464
Dallas, TX 75238
or Whole Earth

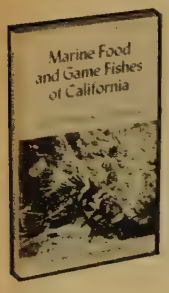
Most instrument work is a slow, tiresome process. You can't take a metal detector into an area and swish it around a couple times and really expect to find anything. Yet, this is what a lot of fellows do. Nine out of ten men are too impatient or allow too little time for the job to be done right. You should allow an hour to scan an area three feet wide and 100 feet long. On the basis of this requirement, if you are to work a farm yard, for example, that is 300 feet wide and 300 feet long, it will take you 200 hours. This is three weeks of everyday work starting at 8:00 in the morning and quitting at 5:00 at night, saturdays and sundays included. The average city block covers this area, so you can see that it takes some 'doings' to cover a large area properly.

Part of a bootlegger's cache found in a cellar where it had been hidden over 30 years ago. Some of the gold coins were as clean and perfect as the day they were minted. All of this must have come from selling a bottle or two at a time. Some of the silver coins were bright but most of them were tarnished due to the sulphur in the rubber container.

Deep-water Fishes of California (No. 25) Marine Food and Game Fishes of California (No. 28)

The best available for off-shore and coastal fishermen. Includes much more than the edible species. There is no key so you must leaf your way through the guide to find the fish. Once found, the description of the fish's natural history is fine and informative.

—PW



Deep-water Fishes of California
John E. Fitch and Robert J. Lavenberg
$2.25 postpaid

Marine Food and Game Fishes of California
John E. Fitch and Robert J. Lavenberg
1971; 179pp.
$2.35 postpaid

both from:
University of Calif. Press
2223 Fulton St.
Berkeley, CA 94702
or Whole Earth

NOMADICS

Hexagrammidae (Greenling Family)
Kelp Greenling
Hexagrammos decagrammus (Pallas, 1810)
Distinguishing characters.— The presence of five lateral lines on each side is characteristic of the genus *Hexagrammos*. Within this genus, the kelp greenling is distinguishable from all other fishes by its color. Males have numerous turquoise-blue blotches on the head and front part of the body, and each of these is ringed by small rust-colored spots. Females are uniformly covered with round reddish-brown spots.

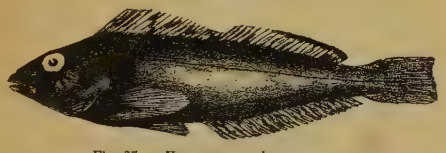


Fig. 25. *Hexagrammos decagrammus*

Natural history notes.— *Hexagrammos decagrammus* has been recorded from Kodiak Island, Alaska, to La Jolla, California, but south of Point Conception it lives in deeper water and is much less common. Throughout their range they live in rocky habitat, especially if there is a good cover of algae. In cold waters to the north, they are common intertidally, and are fairly abundant into depths of 75 feet. Off southern California, they have been hooked in 150 feet of water.

Fishery information.— The kelp greenling is one of the most important species in the rocky-shore fisherman's bag along the north coast. They will take almost any type of bait offered, including cut fish, clams, mussels, shrimp, squid, worms, and small crabs. Shore anglers generally catch much smaller fish than do skindivers, or skiff and partyboat fishermen. More than 56,000 are taken each year by California's sport fishermen, according to results of a survey conducted from 1958 to 1961.

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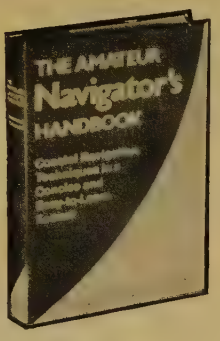
The Amateur Navigator's Handbook

Very well written and systematic in its coverage of coastal navigation (piloting) procedures. Includes all the information needed to handle a days work of coasting, plus details on preparing a deviation table, use of light lists, tide and current charts and a handy appendix of ready reference material. Recommended if you're brand new to the subject.

—AP



The Amateur Navigator's Handbook
Sallie Townsend and Virginia Ericson
1974; 226pp.
$7.95 postpaid
from:
Thomas Y. Crowell Co., Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Bow and Beam Bearing

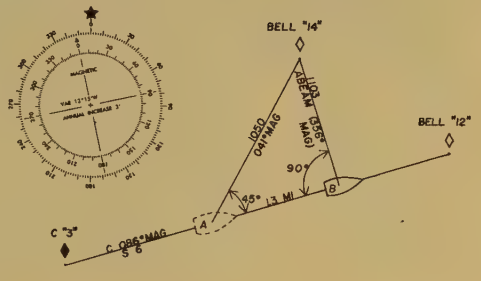


Fig. 11. Bow and beam bearing.

It is possible to obtain a fairly accurate measurement of the distance a navigational aid is away from a boat when the aid is abeam. This method of measurement is called a *bow and beam bearing* and is based on the principle that when one angle of a right triangle is 45°, the two sides adjacent to the right angle are of equal length.

It is necessary to take two separate bearings on the same navigational aid. The first one is taken ahead of the boat to determine when a navigational aid bears 45° to the course line. When the aid bears 45°, the mileage reading for the distance traveled along the course is noted. When the aid is 90° to the course line, or is abeam, a second distance reading is noted. The boat must be heading on the charted course during the entire time.

The distance the boat has traveled along the course between the two bearings is approximately equal to the distance between the boat and the navigational aid when it is abeam. If there is no distance indicator aboard, the elapsed time must be noted between the two bearings, a constant boat speed maintained, and the distance determined by the distance/speed/time formula

$$D = \frac{S \times T}{60}$$

Because of the variables in a bow and beam bearing, it is not considered accurate enough to be called a fix.

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Air Travel & Charter Flight Handbook

Jurgen's handy little paperback is just loaded with hard to find international airline and flight info— the types of tricks that old pro travelers are in the know about on getting twice as much for only half the price. For example he explains how you can buy two 22/45 day excursion tickets and use them for regular economy fare travel, how to miss a flight connection so that the airline will pick up your hotel expenses, details low government-ordered fares and, in other words, does a damn good job of telling you how to beat the system. Read Jurgen's book first, then start planning your trip.

—AP
[Suggested by David Potvin]

Air Travel & Charter Flight Handbook
Jens Jurgen
1973; 192pp.
$4.95 postpaid
from:
Travel Information Bureau
P.O. Box 105-a
Kings Park, NY 11754

The next time you travel aboard a regular scheduled transatlantic flight, ask the person in the seat next to you how much he paid for his trip. It's possible that while you paid $456 for a New York-London round-trip, he may have paid $210. If you were travelling on a summer, regular economy ticket to Rome for $792, the person next to you may have only paid $394. Yet he's travelling on the same plane, on the same date as you are! He's being served the same meal and he had the same baggage allowance. This smart traveller sitting next to you is perhaps a member of a forty person or more group, such as a professional association, sports club, or bird lovers' society. All regular airlines offer such group fares and presently a group needs to have at least forty adults to travel at such reduced rates across the Atlantic. For travel across the Pacific, there are reduced fares for groups of twenty-five or seventy persons or more.

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News About Travel Bargains

Not even the best travel book can include all the travel bargains that pop up from time to time. Many are short lived and have to be taken advantage of immediately before they expire, such as a special discount on a particular cruise. Our domestic airlines also have the habit of introducing sometimes fabulous air travel bargains but discontinuing them shortly thereafter— sometimes before you have time to get to the airport. For several years now I have found two travel publications to be quite interesting and useful and you may want to subscribe to them. One is the **Joyer Travel Report**, a monthly newsletter ($12.00 per year) published by Joyer Travel Report, Box 707, Corona Del Mar, CA 92625. The other publication I can recommend to any travel bug is **Travel**, published by Travel Magazine, Inc., Travel Building, Floral Park, NY 11001.

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ATTENTION!
Charter Organizers and Travel Agents

Do you have too many empty seats on a charter? Do you need another group to share a legal split charter? Or, do you have a group and no plane? Now there is a clearinghouse for such requests— it is the "International Tour Exchange" ITX, Continental Oil Building, High Ridge Park, Stamford, CT 06905. Telephone (203) 329-2001. Telex 966 872. They may be able to help you! (For groups only— not individuals!

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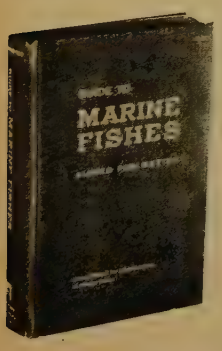
Guide to Marine Fishes

From Cape Cod to Cape Hatteras. The only book I know of its kind. Part One has a great key for easy identification of all marine fishes. Part Two is a running commentary on each fish's economic importance, ecology, size, distribution and more.

—PW



Guide to Marine Fishes
Alfred Perlmutter
1961; 431pp.
$6.50 postpaid
from:
New York University Press
Washington Square
New York, NY 10003
or Whole Earth

Upper lobe of tail much more than twice length of lower lobe

Tiger shark

Upper lobe of tail less than twice length of lower lobe

Mackerel shark

Tire Gauge

Keeping tires at the right pressure is safer, and uses less fuel, and saves on tire wear. Gas station gauges are often very inaccurate. Having one of your own is best. Here's a good one.

—JB

Accu-Gage
$5.25

Mfg. by
G.H. Meiser & Co.
Available at
most auto supply stores

Bug Van

A very fine conversion that turns a VW Beetle into a sort of bus that'll easily sleep 2 and a lot of gear. It looks exceptionally good and only weighs 30 lbs more than the body it replaces. Wind wander is reduced too. Test car still gets 27mpg. You make it yourself for about $400.00.

—JB

BugVan Plans
$10.00
from:

Basic Designs, Inc.
3000 Bridgeway
Sausalito, CA 94965

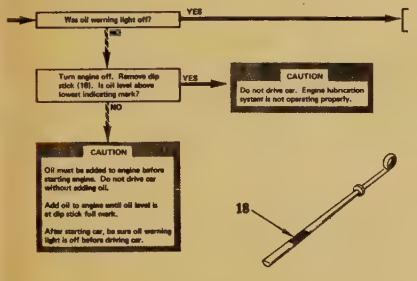
Emergency Roadside Troubleshooting

A single big illustrated sheet that folds up to glove compartment size. It has the clearest instructions for getting a car running again I've ever seen. Written for the mechanical dunce in a logical sequence pattern so diagnosis and field repair (if possible) can be accomplished easily. A good thing to have aboard.

—JB

Emergency Roadside Troubleshooting
$.79
from:

XYZYX Information Corp.
21116 Vanowen
Canoga Park, CA 91303
or Whole Earth



Carefree Cooling

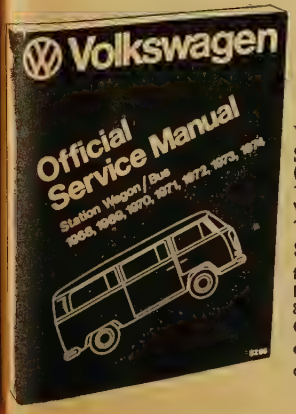
A trick used by Citroen owners for many years is to fill a car's cooling system with a mixture of 50% de-ionized water (available at many pharmacies) and 50% Telar brand anti-freeze. Corrosion is apparently eliminated, even on cars with aluminum heads and radiators. The water in our car is the water that came in it 7 years and 177,000 miles ago. There is no visible corrosion, nor have we replaced or serviced any cooling system part in that time! Everything is still working fine. (Telar changes color if the Ph goes over the edge.) This mixture should work in 2-fluid solar collectors too.

—JB

Volkswagen Official Service Manual

Another of the excellent Bentley service manuals. *(See Pg. 643)*

—JB



Volkswagen Official Service Manual
(Station Wagon/Bus 1968-1974)
Volkswagen of America
1974; 419pp.
$9.95 postpaid
from:
Robert Bentley, Inc.
872 Massachusetts Ave.
Cambridge, MA 02139
or your VW dealer
or Whole Earth

THE ANAL ROBERTS REVIVAL

Sawdust provides the carpeting inside the mammoth circus tent.

The organist is playing a medley of popular religious songs ranging from *I Believe* to *I Don't Know How to Love Him* to Phil Ochs' version of *The Crucifixion*.

Members of the congregation keep looking around hoping to see others they know sitting in the rows upon rows of wooden folding chairs all facing a speaker's platform above which are hung crutches, braces and wheelchairs as tangible testimony to past faith healings.

Tongue Fu and Rosebud Zwalyimeh sit thoughtfully munching a mixture of sunflower seeds, raisins and powdered psylocybin.

The master of ceremonies introduces a retired rock'n'roll star who speaks with a static enthusiasm as though he were reading from non-existent cue cards.

"I once had what I thought was everything. Money. Fame. Power. But something was lacking in my life. I didn't know what. I would travel with my band from city to city. We had our own bus. Our road manager always arranged for us to stay at a Holiday Inn. It was like our home. Everything was the same. The same interior decoration. The same food. Even the disinfectant they cleaned the rooms with smelled the same. The audiences were the same. The groupies were the same. The drugs were the same.

"And then one day I was bored, as usual. I got stoned but that didn't help. Something made me open the drawer and start reading the motel Bible. I really got into the New Testament, which inspired me to write a hit song. You may remember it: *Daylight Saviour Time*. But the more I performed it at concerts the more I realized how hypocritical my success was. So I quit show business and joined the Anal Roberts Crusade. And I'd like to sing it for you here at this great revival meeting. I hope you'll clap hands and join in on the chorus."

Useta be depraved, now I'm saved, now I'm saved
Useta be enslaved, now with Christ my heart is paved

Anal Roberts himself— with massive chest, jutting jaw and arcing pompadour— paces around, microphone in fist, resembling a nervous centaur on a leash. Combining the laying on of hands with the proper patter, he seems to transfer his vibrant energy, one after another, to each individual who walks, hobbles or is wheeled up a ramp onto the platform from a long line of diseased and crippled hopefuls.

He heals the gout and the goiter. He restores hearing and makes piles disappear. He brings Saint Vitus Dance to a halt and relieves the heartbreak of psoriasis. He cures migraines and eurenesis alike.

Finally Rosebud Zwalyimeh approaches Anal Roberts.

"Ah, yes, young lady, you look pretty healthy to me. Exactly what is the nature of your affliction?"

"I have an unwanted pregnancy."

"Hmmmmm. That's the strangest request I've had since I was once asked to cure an entire lame duck Congress." He puts one hand on her abdomen. "Oh, Gawd," he pleads into the microphone, "heal this delayed menstruation!" His whole body is trembling uncontrollably. "Yes, Gawd, I feel your strength surging through me now. Heal! Heal! Heal! Yeeeeeoooooowwwwwiiiii— eeeee!!!"

Tongue Fu watches with a certain sense of bewilderment ....

Flashiebackie:

Post-adolescent Tongue Fu, walking along the beach, automatically stoops to pick up a piece of glass and places it in the pail he now carries for this purpose.

"Put it back in the sand, Anteater," says Luke Warm Sake.

"But, years ago, Say When Daddy taught me to practice such responsibility." His shaved head glistens in the sun. "It is second nature to me now."

"Precisely why you must unlearn that lesson. It is just as second nature for others to leave a piece of glass in the sand. When you learn also to experience their conditioning by reversing your own, you will begin to make awareless choices."

"But have I not already been making ethical choices?"

"To survive, Anteater, you must take nothing for granted. Remember that all of the others believe their choices are ethical too. That is their means of survival."

They continue walking. Tongue Fu sees the jagged rusty top of a tin can. He automatically stoops to pick it up. As he is putting it into his pail, Luke Warm Sake taps him on the arm and quietly waves his forefinger in the air.

"Oops. I have forgotten with much hurry."

"Try and focus your bellybutton on each instant. That is the reason we tattoo the third eye on a Patoonga priest."

"But tell me, Luke Warm Sake, will I not begin to take my focusing for granted?"

"Then you must focus on your very act of focusing, Anteater."

"And will that give me cosmic perspective?"

"It will get you high.... "

"You must be born again"— Anal Roberts is delivering his sermon now— "and Jeezus has to be your midwife! Jeezus is available for each one of us if we only knew where to look! People nowadays think that the Messiah is gonna appear on *The Dating Game*! But I'm here to tell you that the place to look for Jeezus is up your ass!"

"Hallelujah!" voices in the congregation respond.

"Yes, I said Jeezus is up your ass! And we all know that in our secret heart of hearts! I have never met a single human being who didn't stick their finger up their ass when they were alone and then proceed to smell their finger! I have only met human beings who won't admit they do it!"

"Amen!" voices in the congregation respond.

"But Jeezus stuck his finger up his ass and smelled it for all of us! That is an act of humility! That is an act of acceptance! That is an act of surrender! That is an act of Jeezus! When we stick our fingers up our asses and then smell our fingers, we are acting just as Jeezus did!"

"Praise the Lord!" voices in the congregation respond.

"I'm going to ask you to come forward now, up here around this platform, walking with your fingers up your asses! Do you want to feel the compassion of Jeezus? Then I urge you to stick your finger up your ass and smell it! Come on, make that commitment to Jeezus now! Don't be embarrassed to do this in front of your friends!"

Members of the congregation are streaming down the aisles with fingers up their asses and tears in their eyes.

"That's the way! Nothing to be ashamed of! I feel sorry for those of you who don't have the courage to admit publicly— in front of strangers— what you do privately. Let's be open about our humanity! Let's stick those fingers up our asses and smell 'em good! Let's decide to identify with Jeezus and change our lives! We're all gonna smell 'em together!"

Additional converts keep joining the flow, many with such anxiety that it appears they are pushing themselves with their inserted fingers.

The organist accompanies the retired rock'n'roll star as he bellows with magnificent vibrato the song *I Found Jesus in a Dingleberry*.

"Now let us bow our heads. Let us take our fingers out of our asses. Let us smell them and let us feel the joy of Jeezus as we do."

Still seated, Tongue Fu reaches underneath, sticks his finger up his ass and smells it.

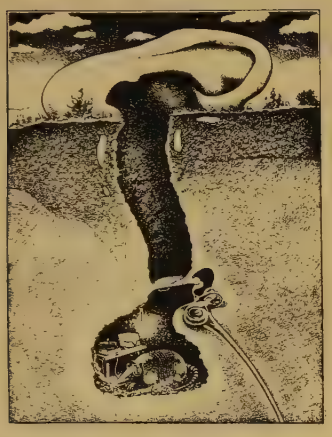
Rosebud, however, sticks her finger up her vagina. Then she removes her finger, holds it up and smells the drop of blood on the tip.

Tongue Fu reaches across with his tongue and licks the drop of blood off the tip of her finger.

Rosebud smiles as they share this moment of intimacy.

[Continued, page 703]

Communications



Communications is the articulation of invisibles—— Network without rim or center. Our non-material ocean. A tickle of magnetism on a tape topples an empire of things. The thing is not dead, but long live the tickle.

—SB

**One of Jim Franklin's armadillos, from* Place, *Vol. II, No. 1.*

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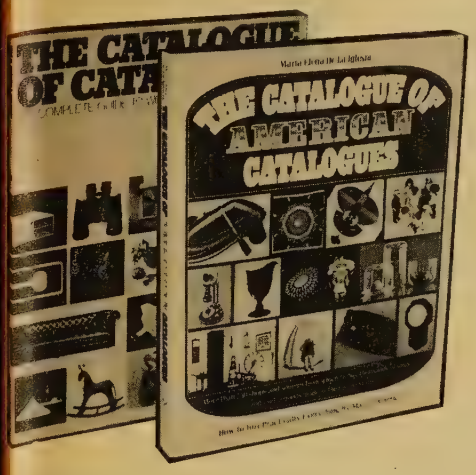
The Catalogue of Catalogues

Despite devaluation of the dollar this comprehensive guide to world-wide shopping by mail can still turn up some incredible bargains—— in quality merchandise. The categories are extensive and include such practical necessities as clothing, fabrics, and household items. Includes a good section on "How to Buy" from abroad and four appendices listing international clothing size charts, import information, conversion tables for currency (rarely necessary), and list of custom charges.

—Carol Pollock



The Catalogue of Catalogues
Maria Elena De La Iglesia
1972; 191pp.
$4.95 postpaid
from:
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

The Catalogue of American Catalogues
Maria Elena De La Iglesia
1973; 272pp.
$4.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

The Catalogue of American Catalogues

Written as a companion to **The Catalogue of Catalogues**, *this book lists the array of unique, practical, beautiful and sometimes highly esoteric merchandise available by mail from sources in the U.S. The categories are generally the same as those in* **The Catalogue of Catalogues** *although somewhat more extensive, as in the food section.*

It is the author's contention that current marketing practices limited to the "big selling items" deny the consumer, even in a metropolitan area, access to a full array of available merchandise of any type. This book remedies that limitation and, in addition, turns up some real bargains. As in the **Catalogue of Catalogues** *all sources described in this book are screened for reliability and merchandise quality, and, again there is a useful "How to Buy" section.*

—Carol Pollock

The King-Size Co., 613 King-Size Building, 24 Forest Street, Brockton, MA 02402
120-page catalogue, free for anyone over 6'3" tall or whose shoe size is from 10AAA to 16EEE. Catalogues sent out nine times a year.

Everything except suits for the tall man, thin or fat—— from watertight overalls to ruffled dress shirts, including Arrow shirts, Shetland sweaters, corduroy jackets, insulated sports clothes, work clothes, underwear, pajamas, shoes and boots, and even a shoe bag for outsize shoes and an extra large down-filled sleeping bag. Plenty of everything to choose from. Shirts start at $8, trousers at $13.

Mothercare Ltd., Cherry Tree Road, Watford WD25SH, England
180-page color catalogue, free. Spring, fall.

A terrific chain of over a hundred stores selling everything for mothers, babies and children up to the age of five—— at lowest possible prices. I can't think of any other shop as efficiently and thoroughly geared to mothers and babies. Anyone who is about to have a baby or who has just had one should look at this catalogue.

Mothercare Ltd Cocoon carrycot, fits into carriages so that a baby can be moved from house to car or carriage without being disturbed. About $12.

Bio-Control Co., 10180 Ladybird Drive, Auburn, CA 95603
Price list and information, free.

Natural methods for the control of insects harmful to food supply of man, Bio-Control sells praying-mantis egg cases (three for $2) and ladybugs (half a pint for $2.75). Included are directions and recommendations for specific types of plants, crops and gardens. There are lower rates for larger orders.

•

The Bank Street Bookstore, 610 W. 112th Street, New York, NY 10025
Mimeographed catalogue, 50 cents

Its practically impossible, outside the very largest cities, to find a good children's bookstore and we unfortunately have never developed local equivalents of London's Children's Book Centre. The Bank Street Bookstore is therefore the answer to many a parent's and teacher's hopes, even though most New Yorkers don't even know of the shop's existence. Located in the new building of the Bank Street College of Education, the store is part of the famous school's education program. Its large and well-selected stock of books "reflects the college's educational philosophy and research programs, which include studies of children's responses to story material." The store catalogue lists most of the books actually in stock, not just the children's books but the many books for teachers and others interested in education.

Cream Rises
CATALOGS

Edmund Scientific *Enormous fascination* 388
Catalogue of Catalogues & Catalogue of American Catalogues *Elegant, careful* 671
Explorer's Ltd. Sourcebook *Thorough on Nomadics* 635
Brookstone Tools *Special tools* 142
Ben Meadows *Outdoor tools* 74
Eastern Mountain Sports *Book like* 268, 659
Sears/Wards *Everything* 229
J. C. Whitney *Automotive gear* 249

The First New England Catalog

A pretty good regional access compendium. Lacks Yankee bite in the reviews. If you live there you'll use it.

—SB

The First New England Catalogue
Marie S. Hall, ed.
1973; 192pp.
$4.95 postpaid
from:
Pequot Press/Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

A Cruising Guide to the New England Coast

"The fog sifts through the spruce trees, the dark weed, swings in the tide, the distant surf on the ledges underlies every sound. The gentle motion in the harbor is never quite lost. Especially at night you feel you are far offshore, just on the edge of life beyond your own."

This Guide gives the sailor more than a description of harbors and facilities, information on piloting, sailing directions, weather conditions and longshore navigation from the Hudson River to the Bay of Fundy.

A Cruising Guide to the New England Coast
by Roger F. Duncan and John P. Ware
1972; 603pp.
from:
Dodd, Mead and Co., Inc.
79 Madison Avenue
New York, NY 10016
$15.00

Synergy Access

There've been a quantity of youth-tech access-to-access publications in the last few years. This is the best of the lot.

—SB

Synergy Access
(A Global Newsletter on Futuristic Communications, Media & Networking)
Wes Thomas, ed.
$5/yr. bimonthly
from:
Twenty-First Century Media, Inc.
606 Fifth Ave.
East Northport, NY 11731

BULLETIN FOR FILM AND VIDEO INFORMATION is a long-needed up-to-date international infosource for independent film and video makers/users. 10 pages/issue of compact info on groups, production, distribution, exhibition, programming, study, clippings. Highly recommended. $2/yr. (presently bimonthly, may go monthly). Anthology Film Archives, 80 Wooster St., NY, NY 10012.

•

COURSE ON SURVIVAL AGRICULTURE (labor-intensive plus contemporary science to avoid "50 million deaths from hunger on 1976") offered at CIDOC, Apdo. 479, Cuernavaca, Mexico.

The First New Zealand Whole Earth Catalogue

Many are the reasons to stop what you're doing and start over in New Zealand, where sanity is rampant. This counter-culture omnibus could help you find your niche. Reportedly an improved new edition is under way.

—SB

The First New Zealand Whole Earth Catalogue
1972; 256pp.
$4.95 plus postage
from:
Alister Taylor Publishing
Box 10-192
Wellington
New Zealand

COMMUNICATIONS

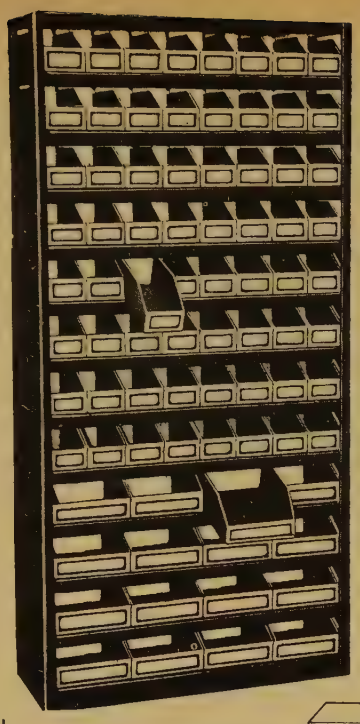
Fidelity Office & Industrial Supply

Cheap good office gear—— especially a myriad of cardboard filing drawers, shelves, flat-boxes, etc. ALL of Whole Earth's filing gear comes from Fidelity.

—SB

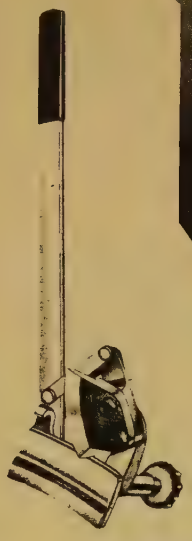
Catalog
from:
Fidelity Products Co.
705 Pennsylvania Ave S.
Minneapolis, MI 55426

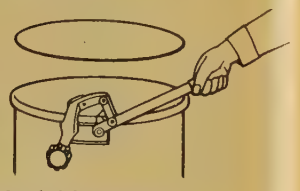
Book-Stor $5.50 in quantity.



Stacking bin shelving $45.95

Utility Desk $10.95.
Super strength budget desk holds 450 lb





Drum De-Header, $51.95 in quantity.

Mail Scale

The United States Post Office sells a teeny (fits-in-shirt-pocket) hanging balance scale for determining postage on airmail, and 1st and 3rd class mail. Ancient idea in new, shiny metal, complete with plastic case and postage rate schedule. Cheap. Heartening. Aesthetically satisfying to use.

—Rick Fields

Mail Scale
$1.98
from:
U.S. Post Office
or
AAA Scale Co.
7340 Madison St.
Paramount, CA 90723

(If you really want to stretch flexibility, hang a tray on the scale and a counter-balance to keep it at zero. You can weigh up to 5 ounces of herbs, spices, etc.)

Express Mail

If you are as bad about meeting deadlines as I am, or if you live in a perpetual state of last-minute, or if your lover lives in San Francisco and you are in Manhattan—— the U.S. Post Office Express Mail Services might be just what you need.

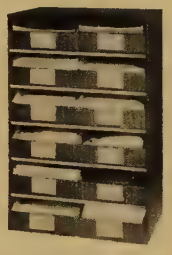
It works like this: bring your letter, or package, to the Main Post Office by 5 p.m. and it will be delivered to the Express Mail window in the Main Post Office of the city of your choice by 10 a.m. the next morning.

It's up to you to notify someone to pick it up.

A regular letter is $1.50. For an additional $4.00 the Post Office will deliver it to the addressee.

There is Express Mail Service between 39 cities.

—Rick Fields
New York City



Vertical Literature Organizer $14.95

MODEL D1420
15¾ inches high
17 inches wide
23 inches deep

MODEL D1430
15¾ inches high
25 inches wide
29 inches deep

MODEL D1440
15¾ inches high
39 inches wide
27 inches deep

MODEL D1460
15¾ inches high
47½ inches wide
37½ inches deep

MODEL	INSIDE DRAWER DIMENSIONS HxWxD in inches	OUTSIDE DRAWER DIMENSIONS HxWxD in inches	SHIPPING WEIGHT	PRICE EACH 1 to 4	PRICE EACH 5 or more	METAL BASE MODEL	METAL BASE PRICE	DRAWER DIVIDER MODEL	DRAWER DIVIDER PRICE
D1420	2 x 15 x 21	15¾ x 17 x 23	23 lbs.	$33.95	$28.95 ea.	D1421	$7.95	D1422	$3.50
D1430	2 x 23 x 27	15¾ x 25 x 29	42 lbs.	$49.95	$45.95 ea.	D1431	$7.95	D1432	$3.50
D1440	2 x 37 x 25	15¾ x 39 x 27	69 lbs.	$69.95	$64.95 ea.	D1441	$7.95	D1442	$3.50
D1460	2 x 45 x 35	15¾ x 47½ x 37½	108 lbs.	$94.95	$84.95 ea.	D1461	$7.95	D1462	$3.50

Base and Dividers not included in above prices.

All prices F. O. B. Minneapolis, California or New Jersey facto

Dvorak Simplified Typing

Back in 1873, when the first typewriter appeared, the average typist found that he could type faster than the machine could respond mechanically. As a result, the typewriter keyboard was deliberately designed to slow down the typist, thus keeping the early machines from jamming. For a century, we have used a remarkably inefficient typewriter keyboard.

Back in 1932, Dr. August Dvorak redesigned the keys after years of exhaustive study— so exhaustive, that modern computer technology is unlikely to improve on Dvorak's keyboard— and announced his findings to the world. The world promptly forgot all about him. The patent on his keyboard finally lapsed, and only a few of the best-informed typewriter salesmen even remember his discovery. Nevertheless, it is possible to special order a typewriter (with a fantastic amount of trouble and confusion among local salesmen and the home branch of the typewriter company) equipped with a Dvorak Simplified Keyboard, or DSK.

STANDARD KEYBOARD

DVORAK SIMPLIFIED KEYBOARD

Statistically, the keyboard allows amazing feats. In the early 1940's, one professional typist achieved an unofficial speed of 180 words per minute on a manual machine. Virtually all the international records for typing speed in the 1930's and 1940's were set on Dvorak-equipped machines. Most people can master the system in a month or two. When fourteen Navy women typists were retrained on DSK machines, within one month they were turning out 74% more work with 68% greater accuracy. (Part of this improvement may have been due to the fact that they knew they were participating in an official test. This always increases efficiency.)

How great an advantage is a Dvorak machine? A professional typist moves his or her fingers over an incredible amount of distance in one day's typing— between twelve and twenty miles! With a Dvorak machine, this movement is reduced to one mile. About 70% of all typing is done by fingers on the "home row" of keys with DSK's, and work is distributed rationally among the various fingers. Fatigue in typing is drastically reduced. As the U.S. Bureau of Standards concluded in 1965: "...there is little need to demonstrate further the superiority of the Dvorak keyboard in experimental tests. Plenty of well-documented evidence exists." (The whole story can be found in the "Science" issue of **Saturday Review** [Oct., 1972] in an article by Charles Lekberg, "The Tyranny of Qwerty.")

Dvorak has written an excellent typing manual, Synergistic Typing, available for $12 from Motivational Communication Corp., Etobicoke, Ontario, Canada. In California, the man who has really pushed for the DSK system is Robert McCauley, who runs a T.V. repair shop in Pasadena. His twelve-year-old daughter once hit 125 words per minute in a controlled test.

If you never learned to type very well, and you're willing to wait for a specially ordered typewriter, several of the manufacturers can supply them (Smith-Corona, IBM Model D). If people would ask for it, maybe IBM would make a DSK ball available for their Selectrics. The same goes for Olympia's new ball typewriter. Drop them a note. (IBM: Parson's Pond Dr., Franklin Lakes, New Jersey, 07430; Olympia: Box 22, Summerville, N.J., 08876.)

Gary North
Long Beach, CA

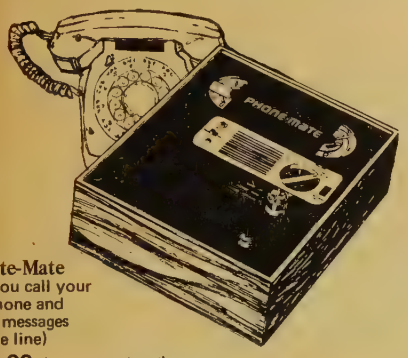
Phone-Mate

Automatic phone answerer and message-recorder, best we've seen. Answers the phone with your current 30-second message jollying the caller into leaving a 30-second message in reply. Vast improvement over answering service and great fun to play with. I have two, one at home and one at office. If you live by the phone at all, it's a good tool. Reportedly local Macy's carry them.

–SB

Phone-Mate
$139.95 (FOB St. Cloud)

from:
The Holes-Webway Co.
Webway Park
St. Cloud, MN 56301



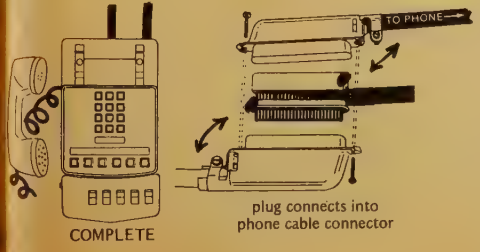
Remote-Mate
(Lets you call your own phone and collect messages over the line)
$269.90 (FOB St. Cloud)

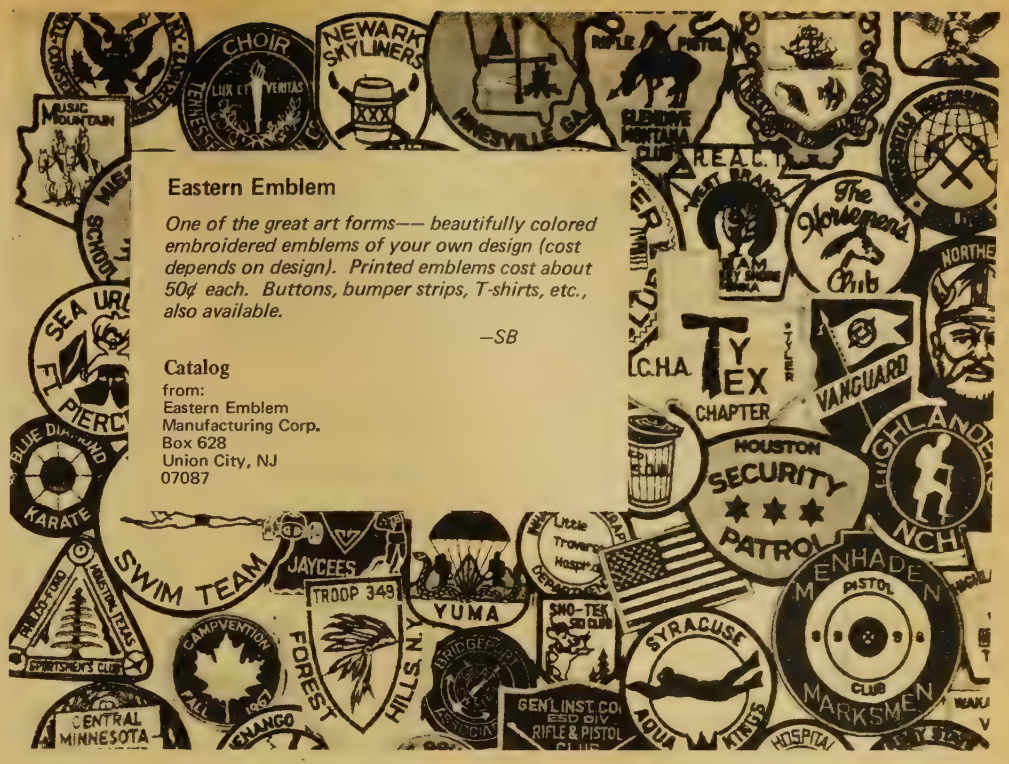
Accurate 500 Conference Caller

Introduce people over the phone, hold remote bull sessions, crowd the air of your radio show, all at great savings over Mother Bell. Mike Phillips claims he's saved the cost of the device in lunches that it made unnecessary. You need a multi-button phone to use it.

–SB

Accurate 500
$70
from:
Accurate Merchandising Inc.
400 Madison Ave.
New York, NY 10017





Eastern Emblem

One of the great art forms–– beautifully colored embroidered emblems of your own design (cost depends on design). Printed emblems cost about 50¢ each. Buttons, bumper strips, T-shirts, etc., also available.

–SB

Catalog
from:
Eastern Emblem
Manufacturing Corp.
Box 628
Union City, NJ
07087

TAP

A newsletter for American Telephone's most ardent lovers, the phone phreaks. Introductory and advanced projects; lively reader feedback. The co-evolution of The Phone Company at its predatory Phreaks is a wonder to watch.

–SB
[Suggested by Al Bell]

TAP
$2 /yr
(Canada $3.50;
other $4.50)
from:
Room 504
152 W. 42nd St.
New York, NY 10036

Pay Phones–– How they work, operator's consoles and procedures, bypassing, using boxes on, coin relay info, etc. We need a digital genius to develop a 74161 programmable divider circuit that needs work. Can someone do it?

Are you interested in building projects in TAP but afraid that you don't have the know-how? If so, you should know that our Electronics Correspondence courses are designed to give you a fast introduction to electricity and to get you started building projects. We're trying to put out 6 courses that will allow beginners to build any project in TAP by the time they're done reading them and doing the experiments. Four courses are ready now and they're 50¢ each (free if you can't afford it). The newest one is **Amplifiers, Course D.** Also, **A, Basic Electricity, B, Alternating Current,** and **C-Basic Phone Operation.**

•

BIT in London publishes the best guide around to going to or through any country–– $6.00 airmail and it's called **Overland through Africa.** Has methods and tips for getting through cheaply. They also publish stuff that you should see if you're heading to Europe. Write BIT, 146 Great Western Rd., London W11 (tel. 012298219 alias KPO441229 8219 ST). Send Int'l Money orders only, no checks please. . . N.J. Bell is replacing glass phone booths with Kayrex, a rigid vinyl, as part of their Coin Patrol program (Quack!). Doors are being removed from booths and they'll convert all the phones to single-slotters by 1976. Finally, they're installing curved pieces of sheet metal at the appropriate level inside the booths so that liquids directed at the sides of the booth are deflected to the customer's feet. . . Paranoid? Aren't we all! RESIST, 763 Massachusetts Ave. No. 4, Cambridge, Mass. 02139 publishes a Movement Security Kit which tells what to do to keep your cool with police, agents and grand juries and even has some true stories about a few sicko agent-types who give radicals a bad name. Send a stamped, self-addressed 8 x 11 envelope and $1 to them. . .

Multi-Counter

Gentlepersons:

For anyone handling up to $2000. of coins daily, the multi-Counter Coin Sorter/Packager @ $34.95 is ideal: against hand sorts/counts/wrapping, the Coin Sorter/Packagers saves 75% or more of the time. And the Instant Count Verifier assures 100% count accuracy, too. In terms of cost, there's really nothing available close to this price that does the whole coin handling job.

In a small sense, its an answer to the energy "crisis": you just plug in gravity, and away you go, sorting 300 coins or more a minute.

In the past 6 years or so this unique Coin Handler has found wide use in just about every coin handling area, including schools, colleges, hospitals, restaurants, hotels/motels, banks (even!) bars, taverns, laundries, vending activities of all sorts, concessions, lodges, bingo, churches, etc., etc.

Please note that each Sorter carries a 3 year guarantee against breakage and wear abrasion, based on the use of high-impact plastic (just like your telephone.)

Service? Except for the movable base leg, there are no movable parts to get "out of whack" or require adjustment. Thus the only need for service is the accumulation of coin dirt, and here an 89¢ can of "Pledge" aerosol wax will remove coin dirt and leave a thin film of wax for the Sorter. (As coin dirt accumulates, you just slightly increase the base angle, which overcomes that "drag." When your base-leg reaches the highest angle, you reach for your "service contract," "Pledge.")

Sincerely,
John F. Van Deusen, Jr.
North Branford, CT 06471

Multi-Counter Coin Sorter/ Packager
$34.95 postpaid
from:
Multi-counter Mfg. Co.
Stroud Rd.
North Branford, CT 06471

Real Time 1
Real Time 2

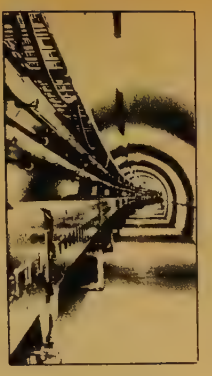
If you use the esoteric items in WHOLE EARTH's Whole Systems and Communications Sections, you ought to get these two books by the author of **By The Late John Brockman** *(Pg. 308) for further access-to-weirdness. They are CATALOG-like, astute, and since they were prepared during WHOLE EARTH's hiatus, I provided jacket copy for* **Real Time 2***: "A guide to new ideas that might well save us from the old ideas."*

–SB

Real Time 1
(A catalog of ideas and information)
John Brockman and Edward Rosenfeld
1973; 240pp.
$3.95 postpaid

Real Time 2
(A catalog of ideas and information)
John Brockman and Edward Rosenfeld
1973; 240pp.
$3.95 postpaid

both from:
Anchor Press
Doubleday & Co. Inc.
501 Franklin Ave.
Garden City, L.I. NY
11530
or Whole Earth



Bending magnets in interior of Main Accelerator at National Accelerator Laboratory. The Main Accelerator is four miles in circumference; 1.24 miles in diameter. NAL Photo.

Alfred North Whitehead, The Free Press, 866 Third Avenue, New York, NY 10022; 1925; or *Real Time*. (P) $1.95, 212 pp.

The Macmillan Company, 866 Third Ave., New York, NY 10022; or *Real Time*. (H) $6.95.

Science, aesthetics, ethics, and religion are the basic human interests that suggest cosmologies and are, in turn, influenced by them. This work is a broad outline of the past three centuries in terms of how the cosmology derived from science has been asserting itself at the expense of older points of view with their origins elsewhere. Written in 1925, it is still up-to-date reading.

•

A clash of doctrines is not a disaster—— it is an opportunity.

•

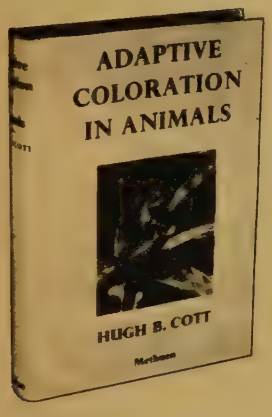
Importance depends on endurance. Endurance is the retention through time of an achievement of value. What endures is identity of pattern, self-inherited. Endurance requires the favourable environment. The whole of science revolves round this question of enduring organisms.

•

Adaptive Coloration in Animals

Any direction you turn, Cott has something to say about aesthetics, drawing, camouflage, advertising, shading, emotional expression and the history of animal perception. One of the great post-Darwin classics. Forms, patterns, rhythms, colors and sensuality—— common to us all.

–PW



Adaptive Coloration in Animals
Hugh B. Cott
1959; 508pp.
$21.00 postpaid
from:
Halsted Press
John Wiley & Sons, Inc.
One Wiley Dr.
Somerset, NJ 08873
or
Western Distrib. Center
1530 S. Redwood Rd.
Salt Lake City, UT 84104
or Whole Earth

We have seen that in its crudest and most generalized condition a cryptic pattern serves to break up an animal's form into a number of more or less contrasted patches of colour whose shapes are arbitrary. While the shapes of these patches entirely fail to suggest to the eye the form of the body on which they are superimposed, they do not necessarily suggest anything else in particular. As far as concealment is concerned, this probably does not much matter in very broken surroundings, so long as the shapes employed destroy the original form and outline without being in themselves unduly conspicuous. However, a further step towards invisibility is taken when the disruptive design more or less closely resembles the particular environment against which it is normally seen—— as happens, for instance, in the case of many moths, birds and fishes. Such animals reproduce on their bodies a detailed picturing of the normal habitat-background—— of bark or lichen, of grass or heather, of coral or seaweed, and thus, when motionless, become extremely difficult to detect.

In war, as in nature, such methods are especially applicable to fixed objects such as observation posts, or to those likely to be viewed against a typical configuration. Such colour-schemes differ from the disruptive type, in being *realistic*, or *scenic*, rather than *abstract*, or *arbitrary*. By their use it is possible, not merely to disguise an object's form, but *to obliterate the break which it causes in its background, and so to render it invisible.*

•

Sea Dragon (Phylloptéryx eques)

Characters adapted primarily to arrest attention, including those subserving distant recognition and distance-warning, must be as conspicuous as possible; and they consist typically in nature of simple patterns and saturated colours, often covering a wide expanse of the body. Such are the white recognition marks conspicuously displayed in flight by Bramblings, Bullfinches, Jays, Wheaters, House-Martins, and many waders and other birds.

On the other hand, visual characters adapted to stimulate emotion, including those relating to threat and eliciting fear, or those which arouse sexual emotion, are generally used at close quarters; and accordingly they tend, as compared with the last class, to be more complex in design, more elaborate in colour, and presented on a smaller scale suited to near vision. Moreover, unlike the simpler and generalized distance-recognition marks, they frequently embody special mimetic or symbolical effects suggestive of objects significant to the observer; and they are commonly accompanied by special actions and attitudes. This is seen, for instance, in the repeated use by all kinds of animals of eye-spots, whether in courtship or rivalry, in warning or bluffing; and in the sudden displays of concealed colours which transform an innocuous animal into an apparently dangerous enemy.

Diagrams illustrating the principle of maximum disruptive contrast, and showing the distractive effect upon the eye of patterns which contrast as violently as possible with the tone of their background.

Animal Forms and Patterns

A philosophical relief from D'arcy Thompson (Pg. 14). No math. No schemata. Just a rambling discussion on how the appearance of animals gives clues to the internal mysteries. The best chapter covers molluscs and their shells—— living molluscs, not Cartesian clams.

–PW

Animal Forms and Patterns
Adolf Portmann
1967; 257pp.
$2.75 postpaid
from:
Schocken Books Inc.
200 Madison Ave.
New York, NY 10016
or Whole Earth

Formation of the face: almost expressionless or highly expressive, according to low or high level of differentiation (sea-cat and young lion).

The way the tail is held, raising the hair on the back or flattening it, the position of the ears, as well as the whole posture of the body, play a large part in the social life of wolves, and are understood by their companions to be a manifestation of internal conditions. The wolf to the left ranks high in the social structure of the group, the other ranks below it. (The illustration does not, however, represent a 'scene', but merely two postures.) At the same time the special form production at the anal pole is made clear.

Oh, What a Blow That Phantom Gave Me!

Oh, What a Blow That Phantom Gave Me! *is about a society in which we acknowledge the control of the media as preliterate man did the words of the Shaman. To digest this book is to absorb the insights of a man floating between primitive and modern cultures in search of the impact of media on the human being.*

It is the author's concern with the recipients of electronic media that makes this an important book. In a series of short chapters, Edmund Carpenter shares his adventures with the reader and discusses the effects of media through very specific encounters with life.

This book is an awakening and a warning, it is almost an apology, and yet a plea for a more professional and compassionate media, where the information is meaningful to the livelihood of the mass community. I would recommend it to anyone in the media business.

—Ceil Gruessing

Oh, What a Blow That Phantom Gave Me!
Edmund Carpenter
1972; 192pp.
$1.95 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

You Can't Say "No" Pictorially

It's easy to say "No" verbally. Words are neutral symbols which stand for a reality but do not resemble that reality.

A picture, however, often resembles reality, especially when that picture moves. This makes pictorial media enormously persuasive. It requires an act of will to disbelieve what one sees & an even greater will to accept the reverse of what one sees.

The New Guinea government circulated large posters that said: Protect Our Rare Birdwing Butterflies; and beneath this, pictures of the butterflies in question, along with the warning: "$200 fine for collecting; $20 penalty per specimen in possession thereof." Villagers immediately collected these butterflies & took them to agricultural officers for payment.

A common beer ad in New Guinea shows a foaming glass with the caption: Be Specific, Say South Pacific. When the sale of beer was permitted to indigenes, the London Missionary Society posted identical ads, except for the caption: Say No. Beer sales immediately increased. Drinkers ordered No.

•

CBS-TV broadcast the picture of an ancient Jack Benny on a TV talk show, in the studio, watching a movie of an elderly pajama-clad Jack Benny, at home, watching an old movie, on TV, in which a young Jack Benny, in the Orient, makes love to Dorothy Lamour.

•

We assume the role of our costume, our information. The public figure's image, detached from his body by electricity,

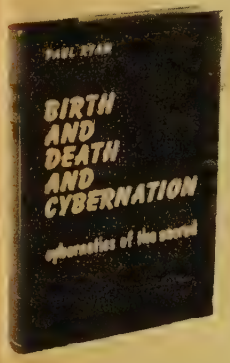
is transferred to ours. His spirit enters us, possesses us, displacing our private spirit. We wear his image, play his role, assume his identity. When Eisenhower suffered a heart attack, the stock market fell. On Moratorium Day in Washington, April 1971, tens of thousands of marchers, clothed in collective guilt, wore Lieutenant Calley masks.

In the preliterate world, spirit possession is thought to occur rarely, under circumstances fraught with mystery & danger. With us, it occurs daily, without wonder, free from examination.

Birth and Death and Cybernation

I like the way Paul Ryan ponders about cybernetics, video, information-economics and other weightless puzzles. I like the way he—– as Bateson put it—– "worships Klein bottles" (diagrammed self-reference paradoxes). I hope he finds a way to keep at it without succumbing to some college or other. His deadly accurate criticism of foundations should protect him from them at least.

—SB



Birth and Death and Cybernation
Paul Ryan
1973; 175pp.
$9.95
from:
Interface
Gordon and Breach, Science Pub. Inc.
1 Park Ave.
New York, NY 10016
or Whole Earth

Videotape enables a person to be present to himself in a new way. This past summer an eleven-year-old black girl was hitching home from Star Lake summer camp. The counselor caught up with her. Her main complaint—– "I'm ugly." He had the sense to take her to the VT setup and show her herself on tape. "Ooh, that's me, huh? Okay."

•

Relative to video infolding, it is near impossible to describe in words even using klein form graphs what I'm talking about. The following will mean little to anyone except those who have had some experience of taping themselves at different levels.

Taping something new with yourself is a part uncontained.

To replay the tape for yourself is to contain it in your perceptual system.

Taping yourself playing with the replay is to contain both on a new tape.

To replay for oneself tape of self with tape of self is to contain that process in a new dimension.

Parts left out of that process are parts uncontained.

All of this is mapable on computer graphic terminals.

At one level that of reality that is left off the tape is the part uncontained.

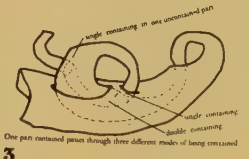
Raw tape replayed is part contained in the head.

If it is somebody else's tape you are watching you can to an extent share in this live perceptual system via the tape he took.

To watch another's edited tape is to share in the way he thinks about the relation between his various perceptions in a real time mode. This enters the realm of his intention.

If you are editing some of your tape along with tape somebody else shot and he is doing the same thing using some of your tape, then it is possible to see how one's perceptions relate to another's intention and vice versa.

•



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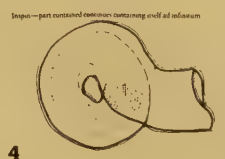


4

The movement away from capitalism toward ecological narcissism is, at least in part, the embodying of mind in infomorphs. *By infomorph, I mean an organism that relates to itself and its environment in a way that respects and optimizes all possible transforms of differences that make differences.* It does not identify one variable, such as profit, and attempt to maximize that variable at the expense of the whole.

•

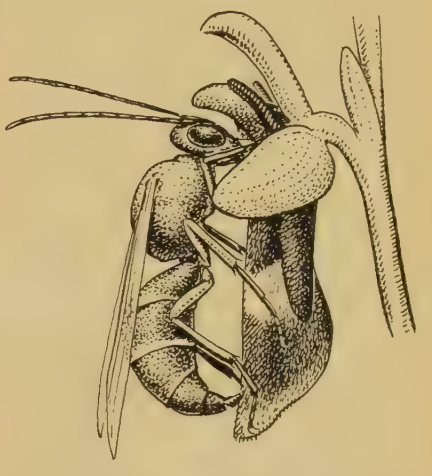
A mind that concerns itself too much with what it knows cannot maintain a good guessing way. Openness to the unknown is part of having a feel for what is relevant as things develop, a sense of the significant differences while there is still time to make a difference. Such access to relevancy is part of the freedom to self-correct that information economy can supply. What we don't know is an infinite resource, inexhaustibly recyclible. It seems possible to develop out of our ignorance a culture with a fullness of feedback such that we would not be recurringly faced with the choice between cannibalizing the human relations we have or solo-tripping to regions we cannot relate to those we love nor ask them to trust.

Mimicry in Plants and Animals

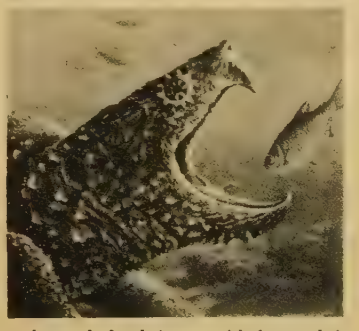
Mimicry will blow your mind. Beautiful illustrations of how two or three creatures have passed so much time together that they merge inextricably. Flowers mimic super-female wasps which the males fuck "mistakenly" and so fertilize the flower. One butterfly tastes bad and a dozen others evolve disguises so they appear to birds as a "bad taster." Spiders evolve to appear like ants so they can enter colonies for a meal. Hundreds of mind-bogglers.

—PW

Mimicry in Plants and Animals
Wolfgang Wickler
1968; 249pp.
$2.45 postpaid
from:
McGraw-Hill Book Co.
Princeton Rd.
Hightstown, NJ 08520
Manchester Rd.
Manchester, MO 63011
8171 Redwood Hwy
Novato, CA 94947
or Whole Earth



Male of the long-horned bee attempting to copulate with the flower, with the head of the bee with attached pollen sacs shown.



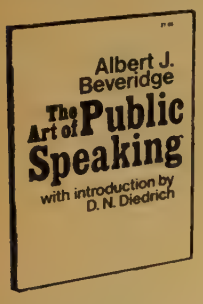
Predators that angle for their prey with dummy bait. The angling turtle Macroclemmys temmincki.

Butterflies of the genus Thecla *draw attention away from the true head and direct it to an imitation head at the hind end by means of converging colour stripes on the wings and antenna-like appendages on the wing tips. In addition,* Thecla togarna *on landing swings its hind end into the previous direction of flight and subsequently flies off in the opposite direction.*

The Art of Public Speaking

A short classic work that says with warmth all that need be said on the subject. Use this book to help revive lucidity in public.

–SB



The Art of Public Speaking
Albert J. Beveridge
1924, 1974; 68pp.
$1.95 postpaid
from:
Nash Pub. Corp.
E. P. Dutton & Co., Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

As to composition and structure of the speech, the rules of that art may be summarized thus:

Speak only when you have something to say.
Speak only what you believe to be true.
Prepare thoroughly.
Be clear.
Stick to your subject.
Be fair.
Be brief.

•

The rules of delivery may be indexed thus:

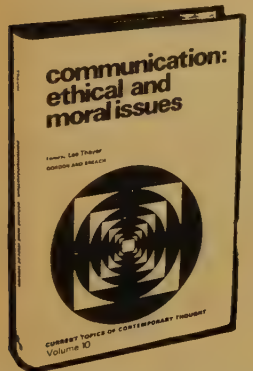
Speak quietly and naturally.
Be serene and never pompous.
Enunciate distinctly.
Control emotion–– never get excited.
Dress well; neither negligently nor with ostentation.
Suppress the craving for applause.
Stop when you are through.

Fear not that your speech will lack fire. If you mean what you say, fervor will come naturally and with effectiveness. The fact that you are in earnest will give force and vigor to your delivery. But control your intentness–– do not let it control you.

Communication: Ethical and Moral Issues

Much meandering goes on in this collection of papers and conversations by commo profs. I wish the editor or Boulding or someone had gone through the whole damn thing, extracted the creamiest thorniest most original remarks and given us one chapter of just them. . . Because the book IS on the right track, taking hold of ethics by the handle of communications. The concluding paper by Warren McCulloch "The Superfluity of Naughtiness" is pure whipped cream.

–SB



Communication: Ethical and Moral Issues
Lee Thayer, Ed.
1973; 384pp.
$19.50 postpaid
from:
Gordon and Breach,
Science Pub. Inc.
1 Park Ave.
New York, NY 10016
or Whole Earth

If we had had television twenty years earlier we might well have been spared the agony of Adolph Hitler, for he would have looked absurd on a television screen, as Joe McCarthy did in the early fifties.

–Boulding

Lord Acton gave us a very fundamental principle: Power corrupts; absolute power corrupts absolutely. There are many corollaries. For example, consider this: Impotence corrupts; absolute impotence corrupts absolutely. If the working class becomes impotent, we will have just as dangerous a situation as if we had a malevolent dictatorship.

–Boulding

About you and about my first and earliest years I have only hearsay. Somehow, I must have learned to spot things like my toes and fingers, my ears, nose and mouth, and so to recognize myself among the things I spotted. I was what bounced, crawled, wiggled, and giggled. Mine were the toys that I could move, mine the people who came when I called and did what I wanted. All else was it. It went by a will or law of its own, and I knew it because it went agin' me. That made it real. Good may be nebulous: Bad is Real.

–McCulloch

Cream Rises

COMMUNICATIONS PHILOSOPHY

Understanding Media *Classic McLuhan* 308
Culture Is Our Business *Graphic McLuhan* 309
Steps to an Ecology of Mind *Cybernetics of interaction* 453
Adaptive Coloration in Animals *Classic* 674
Intelligent Life in the Universe *Cosmic conversing* 312
Art and Illusion *Sensible analysis* 356
The Intelligent Eye *Imaging* 314
The Art of Written Forms *Loveliest* 677
Diagrams *Conceptual mapping* 306

The Magic of the Senses

Takes you right through the spectrum of eyes till we leave human perception and join those animals that see into the ultraviolet, feel in the electromagnetic, infra-red and the supersonic. Lays out all the pre-conditions for any communication.

–PW

The Magic of the Senses
Vitrus Droscher
1969; 298pp.
$3.25 postpaid
from:
Harper Colophon Books
Harper & Row Gen. Bks.
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Figure 40. The air-conditioning plant of a termite hill. The radiator fins visible from outside are lined with ventilation shafts through which the air passes down into the vaults. From here the whole nest is ventilated.

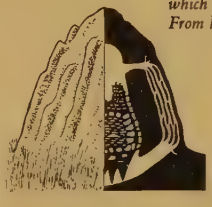


Figure 79. The organ of balance of the St. James's shell (Pecten jacobaeus), the so-called statocyst, is a device of ingenious simplicity. If a small round stone, in the cavity padded with sensory hair cells, touches particular hair cells, their impulses are taken by the nervous system as information that the shell's body is in a state of balance. Impulses from all the other sensory hairs always aim at making the shell return into that state as soon as possible.

The male of the garden spider 'phones' his chosen bride. He attaches a thread to her web, which he plucks in a certain rhythm. Related species cling to such a thread in order to make it vibrate by jerky movements. By the way the female reacts and by what kind of vibrations she sends out in her turn, the male knows how great the danger is of being eaten by his bride, or whether he can risk mating.

•

On an autumn night the robin is seized by migratory restlessness. It looks towards the stars, recognizes from them the south-westerly direction which will lead it to Spain, its distant destination, and flies off, quite alone, without its mate, young, or any companions–– though other robins, of course, do the same quite independently. But as soon as the night sky is overcast and the robin can no longer recognize any signpost stars, it does not, like the blackcap, need to land and wait for clear weather again. Like a sailor on the high seas, it switches over to steering by magnetic compass and flies on unerringly over rivers, lakes, and mountains, till it has reached its destination in that distant country.

Nonverbal Communication

Nonverbal communication is also largely unconscious (for good reasons). Here is the first major formal NOTICING of the universe of interaction above, below, and around words–– illustrated dryly with a wealth of snapshot-photographs. A decade before Body Language *and conceptually far more interesting. Pioneer Work.*

–SB

Nonverbal Communication
Jurgen Ruesch & Weldon Kees
1956, 1972; 205pp.
$4.95 postpaid
from:
University of California Press
2223 Fulton St.
Berkeley, CA 94720
or Whole Earth

The relationship between verbal and nonverbal codifications can be conceptualized best through the notion of meta-communication. Any message may be regarded as having two aspects: the statement proper, and the explanations pertaining to its interpretation. The nature of interpersonal communication necessitates that these coincide in time, and this can be achieved only through the use of another channel. Thus, when a statement is phrased verbally, instructions tend to be given nonverbally.

Unlike nonverbal codifications, which are analogic and continuous, verbal codifications are essentially emergent, discontinuous, and arbitrary. The versatility of words–– and this includes numbers–– may, however, have dangerous consequences. Words and–– to a lesser degree–– gestures are commonly thought to be the principal means through which messages are conveyed. Even though such a view is not substantiated by fact, it is convenient–– especially for purposes of public administration and law–– to assume that we live in an almost exclusively verbal world. This emphasis upon the verbal is a by-product of modern civilization, with its accelerated centralization of control, in which increasingly more people do clerical work and fewer people are engaged in productive work. One of the consequences has been the creation of a staggering variety of middlemen who traffic solely in information. Not only salesmen but even many executives seem to have become credulous of their own propaganda, a situation that is further aggravated by the fact that most of these men have rather limited contact with many of the processes they symbolically deal with or control. The danger of this remoteness from reality lies in the tendency to regard abstract principles as concrete entities, attributing body and substance to numbers and letters and confusing verbal symbols with actual events. Such a way of thinking is an almost inescapable occupational hazard of those who use words for purposes of control.

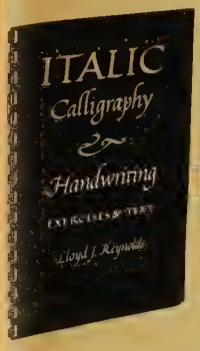
When verbal and digital symbols are not repeatedly checked against the things they purport to stand for, distortions of signification may develop that nonverbal languages seldom bring about. Since in everyday communication these shortcomings of verbal language are difficult to avoid, people often intuitively resort to the use of nonverbal, analogic language, which is more closely tied to actual events.

Sit down by invitation only

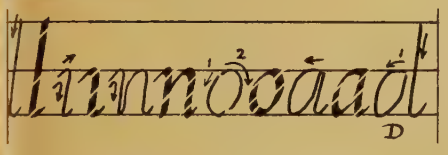
Italic Calligraphy & Handwriting

This is a very good book for beginning calligraphers or students wishing to learn Italic handwriting. There are 23 plates, each with a corresponding page of written explanation and discussion. Mr. Reynolds begins with the basics of calligraphic lettering: holding a pen properly, definitions (e.g., pen angle, scale, parts of a letter) and advice for practicing. He continues with diagrams and notes on how to make lower and upper case Italic letters and how to join these letters to develop a cursive hand. Sections on Roman Capitals, "the queen of alphabets", layout and book design complete this small but informative book.

—Antonia T. Smith



Italic Calligraphy & Handwriting
(Exercises & Text)
Lloyd J. Reynolds
1969; 60pp.
$3.00 postpaid
Pentalic Corporation
132 West 22nd St.
New York, NY 10011
or Whole Earth



Be certain when you do this dry pen exercise that the edge of the pen always matches the angle of the white line. Note that at this pen-angle, the edge of the pen designs the thick and thin contrasts and gradations. Unless you acquire the 45° pen angle *at the beginning*, all subsequent work will be wrong. Italic current-cursive—— rapid personal handwriting—— requires frequent hairline diagonal joins, and they *demand* a steep pen angle.

•

Working to music (such as Mozart's *Symphony No. 40 in G Minor*) and concentrating on *listening* will teach you much about possibilities of rhythm in pen touch and movement. And by listening rather than watching the pen fearfully, you may find that the tactile and kinetic images of the letters are safely in your hand—— and you can stop worrying. Writing with the eyes closed is also a good test of what your hand and wrist know and whether you can trust them.

Cream Rises
CALLIGRAPHY

Writing and Illuminating and Lettering
Basic text of traditional calligraphy 363

Italic Calligraphy and Handwriting
Best exercises in beginning basics 677

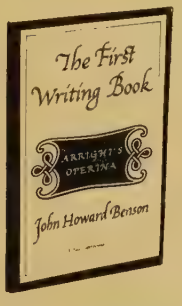
The First Writing Book
Renaissance writing manual, the first 677

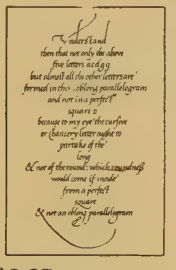
The Art of Written Forms
All-round resource book, book scripts 677

The First Writing Book

Here is the italic script at its finest—— a source of inspiration for dancing, leaping letters. Each page contains a graceful balance between centered formality and flying, swooping flourishes. If you want to teach yourself calligraphy from a book, this is a good one to start with; the original Italian edition of Ludovico Arrighi's famous Renaissance writing manual, a fine translation and facsimile text by John Howard Benson, with excellent explanatory notes by Benson at the end. Remember in the beginning it's important to copy the letters as closely as you can, (and these letters are fine models). Your own style will evolve out of this discipline.

—Barbara Bash



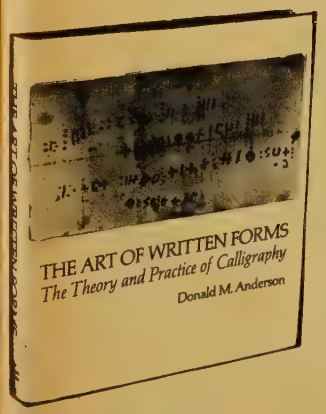


The First Writing Book
(Arrighi's Operina)
John Howard Benson
1954; 47pp.
$2.25 postpaid
from:
Yale University Press
302 Temple St.
New Haven, CT 06511
or Whole Earth

The Art of Written Forms

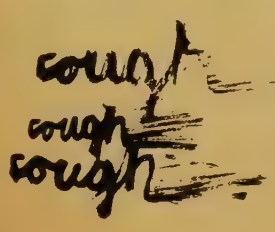
First of all, this book is a great buy. It's well designed, clearly written and contains a plethora of good illustrations. Anderson succeeds in covering a lot of historical material in an interesting way. The bonus of a good section on tools, modern type design, and Greek, Aramaic, and Chinese writing make this one of the best all-around resource books for anyone interested in the alphabet. There is also an excellent bibliography.

—Barbara Bash



The Art of Written Forms
(The Theory and Practice of Calligraphy)
Donald M. Anderson
1969; 358pp.
$10.95 postpaid
from:
Holt, Rinehart & Winston, Inc.
383 Madison Ave.
New York, NY 10017
or Whole Earth

Writing by Hafiz Osman. Topkapi Saray Museum, Istanbul.



Author's copy of Tibetan writing.

CALLIGRAPHY SUPPLIES

by Barbara Bash & Antonia T. Smith

PEN NIBS

Although Speedball is well known there are better brands. Look for BRAUSE, WILLIAM MITCHELL, or HEINTZE nibs. I use Brause because they're well designed, easily cleaned and are available where I live. (They cost 18¢ a piece.) You can send for the Mitchell or Heintze tips through Pentalic, listed below. The lighter the pressure on a pen point the longer it will last. If your letters start to look thuddy (and you're writing lightly) try sharpening the point on some crocus cloth (very fine sandpaper). Hold the pen in the writing position and make figure eights on the cloth.

For larger letters, COIT steel brush pens are much better than Speedball—— they flow better and don't spatter. They come in sizes up to one inch in diameter. Order them through an art store.

FOUNTAIN PENS

Pelikan has a good fountain pen and also some nice colors in fountain ink. I've had no trouble with clogging (as I've had repeatedly with Osmiroids) and when the tip gets dull it can be sharpened on an Arkansas stone. It can be ordered from Italimuse, Inc. Cost is $7.50.

If you want to save some money you can make your own broad-edged pen. Buy a Shaeffer fountain pen (called "the People's Pen" for $1.00. Snip off the tip with a straight cut at the desired width and smooth the rough edges off on an Arkansas stone. Works beautifully.

Platigum also makes a fountain pen. I've never used it but I've heard some good reports. You can order it from Pentalic. Remember never to use India ink in any fountain pen—— it's too thick and will clog. All pens and pen nibs can be cleaned in an ammonia and water solution.

INKS

Artone is good, so is Pelikan. For especially opaque colors try the Pelikan "Special Red" "Special Black" etc. series. If you want to mix your own, the Chinese stick inks are excellent.

PAPER

For practicing, any inexpensive bond paper will do. For final work, Strathmore makes a good smooth white drawing paper and also a lightly textured charcoal paper that takes the ink well and comes in beautiful colors. Some more expensive papers that are really fine to write on are Arches, Rives, Crown & Sceptre. Then there's always vellum and parchment—— a good supplier is H. Band & Co. listed below.

FOR SUPPLIES, BOOKS, AND INFORMATION

Italimuse, Inc.
29 Ridgeway
Greenwich, CT
06830

Pentalic Corp.
132 West 22nd St.
New York, NY
10011

Museum Books
(See Pg. 546)

H. Band & Co. Ltd.
Brent Way, High St.
Brentford, Middlesex
TW8 8ET
England

The Society of Scribes & Illuminators
6 Queen Square,
Bloomsbury
London WC1N 3AR
England

(You must become a lay member of the Society in order to receive their newsletter—— but it's worth the $7.00—— the price may go up some—— they have good listings of English suppliers.)

EXCITING IDEA SOURCES FOR FORMS, PROPORTIONS, SPACING AND TECHNIQUE:

2,000 Years of Calligraphy, Dorothy Miner, Victor Carlson, & P.W. Filby, compilers. 1972. $17.50 postpaid from Rowman & Littlefield, 81 Adams Dr., Totowa, NJ, 07512.

The comprehensive catalog from the Baltimore calligraphy exhibition of 1965. It covers from the Roman inscriptional letters of the 1st century through the modern calligraphic revival in England, Germany, and America with exciting examples of book covers, rubbings, citations, awards, poetry and prose. Leafing through it always seems to open me up to new possibilities.

Lettering as Drawing: the Moving Line & Countour and Silhouette, Nicolette Gray, Pentalic Corporation, 132 W. 22nd St., New York, NY 10011, 1970; $3.00 each (2 volumes).

Calligraphy as the movement of energy on the page—— an exciting approach to letter forms. Included are some amazing examples from old manuscripts that are as abstract as anything happening today.

The Development of Writing, Hans Meyer, Graphis, 979 Third Ave., New York, NY, 10002, $4.00 postpaid.

Over sixty different alphabets all written by one person which gives a continuity of style lacking in most other books.

The History and Technique of Lettering, Alexander Nesbitt, 1957, Dover Publications, Inc., 180 Varick St., New York, NY 10014, $3.00 postpaid.

Includes a very good historical section with many clear examples and also a practical course in lettering—— with the broad pen, built-up letters, script, and poster design.

•

BOOKMAKING ACCESS

BY ROBIN RYCRAFT
4205 South West 53 Avenue
Corvallis, Oregon 97330

This list of names and organizations is prepared for those interested in how and why books are made. In considering use and accessibility, many titles and names are omitted. They may be found in the bibliographies of these same books.

BIBLIOGRAPHY
(4-74)

Papermaking
Library of Congress, Information Office, Washington, D.C. 20540
1968 $3.00
Historical approach. Focus mainly on American tradition and development.

Paper
Quentin Fiore
Tamarind Institute, University of New Mexico
108 Cornell Avenue S.E., Albuquerque, NM 87106 $1.50
Covers both Eastern and Western tradition as well as explaining the art of watermarks.

Writing, Illuminating, and Lettering
Edward Johnston
Pitman and Sons $10.75
The art and craft of writing with an edged pen.

Cleaning and Preserving Bindings and Related Materials
Carolyn Horton
American Library Association $5.00
A practical approach for any librarian who needs to confront the physical problems of books. Insight for those who know little about these problems.

The Restoration of Leather Bindings
Bernard Middleton
American Library Association $10.00
Technical approach to restoration and conservation work. Good introduction on physical evolution of the book. Relates change of form to use.

Bookbinding and the Care of Books
Douglas Cockerell
Pitman and Sons $10.00
Traditional "English" approach to fine binding. Good reference but difficult for the beginner without guidance.

Creative Bookbinding
Pauline Johnson
University of Washington Press, Seattle, WA $12.00
This work was written with the teacher in mind. There are many simple projects for the classroom. Deals with historical binding methods as well.

Bookbinding as a School Subject
Douglas Cockerell
TALAS $.75

Three Methods of Marbling
Dryad Press
TALAS $.50

Printing It
Clifford Burke 1972
Book People
2940 7th St.
Berkeley, CA 94710 $3.00
How to get the message to the people. . . and more.

Bookbinding, Its Background and Technique
Edith Diehl
Kennikat Press, Inc.
90 South Bayles Avenue, Box 270
Port Washington, NY 11050 $27.50
Two volumes: One on history, Two on technique. Good if you can afford it. Try your library.

Decorated Bookpapers
Rosamond Loring
Department of Printing and Graphic Arts,
The Houghton Library
Harvard University
Cambridge, MA 02138 $5.00
One of the many crafts related to bookbinding. Excellent. Third Edition.

The Story of Printing and Bookmaking
Douglas C. McMurtrie
Oxford University Press
200 Madison Avenue, New York, NY 10016 $17.50
Mainly historical. Try the library for this one.

The History of English Craft Bookbinding Technique
Bernard Middleton
Hafner Publishing Company
866 Third Avenue, New York, NY 10022
The history of technique in bookbinding.

The Art of the Printed Book 1455-1955
The Pierpont Morgan Library 1973
29 East 36th Street, New York, NY 10016 $22.50
An Elegant book. Excellent text and reproductions.

The Arts and Craft Movement in America 1876-1916
Robert Judson Clark
Princeton University Press
Princeton, NJ 08540 about $7.50
Book production in America. Excellent.

The History of Bookbinding 525-1950
Dorothy Miner
The Walters Art Gallery
600 North Charles Street
Baltimore, MD 21201
Good black and white reproductions of fine bindings, gold tooling.

MATERIALS AND EQUIPMENT
(4-74)

TALAS
104 Fifth Avenue
New York, NY 10011
Excellent supply source. Deals with professionals and amateurs alike. Prices a bit high but everything is available for immediate shipment. Any quantity. Has good selection of books on bookbinding, restoration. Catalogue, $1.00.

Nevins Bookcrafts
2622 West 7th Street
Los Angeles, CA 90057
Another source for the beginner. Reportedly good. Personal help.

The Designer Bookbinders' Directory
Designer Bookbinders
12 Cornwall Mansions
33 Kensington Court
London W8 5BG $7.50
This directory has many valuable addresses. Excellent for any resource library. The first of its kind for bookbinders. (For immediate needs, TALAS is the better source.)

PAPER

Aiko's Art Materials Import
714 N. Wabash Avenue
Chicago, IL 60611
Japanese handmade paper and various art supplies. Ask for catalogue, about $3.50.

Andrews-Nelson-Whitehead
31-10 48th Avenue
Long Island City, New York 11101
European handmade and mouldmade papers. Catalogue about $3.00. Minimum order - $25.00.

Peggy Rycraft
4205 S. W. 53rd Avenue
Corvallis, Oregon 97330
Marbled paper. Samples on request ($1.50). Sheet size, 20" X 26". On paper in stock, $3.00 per sheet.

BOOKBINDING ORGANIZATIONS

The Handbookbinders of California
P.O. Box 99434
San Francisco, California 94109
Membership: $10.00 yearly

Guild of Bookworkers
1059 Third Avenue
New York, New York 10021
Membership: $30.00 Yearly
Publish quarterly journal.

DEALERS IN OUT-OF-PRINT BOOKS

The following book sellers taken from the **American Book Trade Directory** deal in old and out-of-print books. Also, most of them have indicated a willingness to search beyond their stocks in the out-of-print trade in general. This list is submitted for your convenience only and does not constitute a recommendation.

Albion Book Shop
1319 F St., N.W.
Room 108
Washington, D.C. 20004
783-6698

Barnes and Noble, Inc.
105 Fifth Avenue
New York, NY 10003

Capitol Hill Bookshop
525 Constitution Ave, NE
Washington, D.C. 20002
547-1121

Classic Book Shop
1515 Broadway
Detroit, MI 48226

Dauber and Pine
66 Fifth Avenue
New York, NY 10011

Estate Book Sales
1724 H St, NW
Washington, DC 20006
298-7355

Goodspeed's Book Shop, Inc.
18 Beacon St.
Boston, MA 02108

International Bookfinders
Box 3003, Olympic Station
Beverly Hills, CA 90212

Peter Keisogloff, Books
53 The Old Arcade
Cleveland, OH 44114

Kroch's and Brentano's
29 S. Wabash Avenue
Chicago, IL 60603

George S. MacManus Co.
1317 Irving St.
Philadelphia, PA 19107

Park Book Shop
617 F St, NW
Washington, DC 20004
628-9618

H. B. Pedersen and Company
Box 116
Old Chelsea Station
New York, NY 10011

The Seven Bookhunters
Box 22
Old Chelsea Station
New York, NY 10011

A source for new publications on subject matter relating and/or demonstrating quality book making. (Current April 1974).

The American Philosophical Society
104 South Fifth Street
Philadelphia, PA 19106
Ask for publications in print.

Bibliographical Society of America
P.O. Box 397 Grand Central Station
New York, NY 10016
Quarterly Journal

David R. Godine, Publisher
282 Newton Street
The Barn
Brookline, MA 02146

Department of Printing and Graphic Arts
The Houghton Library
Harvard University
Cambridge, MA 02138

Paper Conservation News
15 Broadway
New Haven, CT 06511
Quarterly abstract on recent developments in conservation and restoration.

The Perishable Press Ltd.
Mount Horeb, WI 53572
Private press of unusual quality.

The Pierpont Morgan Library
29 East 36th St.
New York, NY 10016
Publications and slides on rare books and manuscripts.

The Walters Art Gallery
600 North Charles St.
Baltimore, MD 21201

Publications Office
Yale University Library
Box 1603 A, Yale Station
New Haven, CT 06520

Additional Suppliers

B. L. Beck adds the following to Robin Rycraft's list.

Russell Bookcrafts
Hitchin,
Hertz, England

Much cheaper to get goat & calfskin directly.

H. Band & Co. Ltd.
Brent Way, High St.
Brentford, Middlesex,
England.

Ditto.

T.N. Lawrence & Son
2 Bleeding Heart Yard
Greville St.
Hatton Garden
London EC1, England

Much cheaper to get English & Japanese hand made papers here.

J. Hewit & Sons Ltd.
97 St. John St.
London, EC1,
England.

Leather & general bookbinding supplies

Rougier et Plé
114-118 Rue du Temple
Paris, 3e

Knives, tools, etc.

Gane Brothers & Lane
218 Littlefield Ave.
S.San Francisco, CA
94080

Board, board cutters, hot-stamping machines, thread, gold foil.

Craftool
1421 W. 240th St.
Harbor City, CA
90710

Bookbinding presses.

S. Flax
250 Sutter St.
San Francisco, CA
94108

Japanese papers, strathmore, etc.

Yasutomo
24 California St.
San Francisco, CA
94111

Large selection of Japanese papers in lots of 10 sheets or more.

Cream Rises
BOOKMAKING

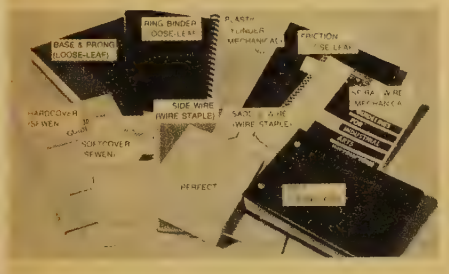
Bookmaking *Best all-purpose* 362
Editing By Design *Best on Design* 679
Writing and Illuminating and Lettering *Off the typewriter* 363
The Publish It Yourself Handbook *Inspiring accounts* 680
A Manual of Style *The standards* 680

Comprehensive Graphic Arts

A thoroughly annoying textbook format, but comprehensive on graphics industry—— and current—— it is . (Also patronizing, soulless, overwrought. The textbook form is for BURNING.)

—SB

Comprehensive Graphic Arts
Dr. Ervin A. Dennis & Dr. John D. Jenkins
1974; 548pp.
$15.95 postpaid
from:
Howard W. Sams & Co. Inc.
The Bobbs-Merrill Co., Inc.
4300 W. 62nd St.
Indianapolis, IN 46268
or Whole Earth



Books of various sizes and thicknesses bound by common binding methods.

Bookbinding by Hand

As in other machine dominated fields, the worse trade publications get, the more hand craftsmanship will be again valued. The field of bookbinding now includes original binding, rebinding, repair restoration and conservation. In general hand bookbinding is not taught in this country except through formal, expensive private lessons and an occasional freak course here or there. My experience has been that it is possible to learn binding through books. The Town book is the best I've found. .There are clearly written instructions and excellent diagrams for all types of binding from the simplest caseing to the most advanced full-leather binding. He also tells how to repair paper.

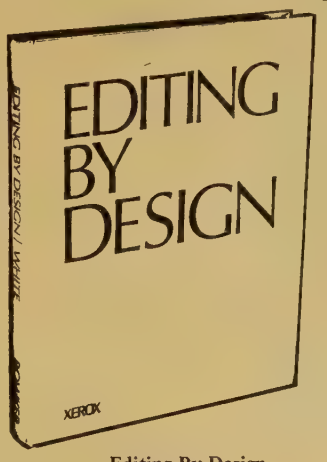
—B.L. Beck

Bookbinding by Hand
Laurence Town
1951; 292pp.
$4.85 postpaid
from:
Faber & Faber Ltd.
3 Queen Square
London WC1N
3AU, England
or Whole Earth

Editing By Design

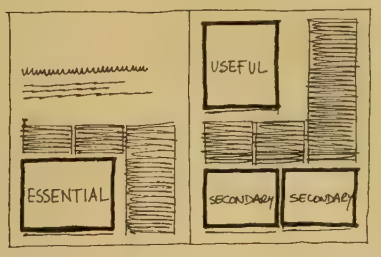
Outstanding book on design—— using the image and images of the page to carry a message with pure clarity. This one book, heeded, could CURE the rotten design of most home publishing—— build the communicative base to evolve upon.

– SB

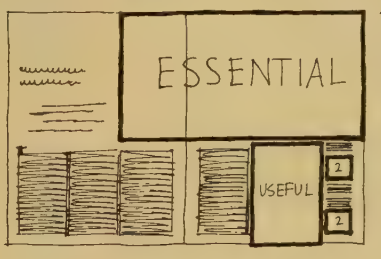


Editing By Design
Jan V. White
1974; 230pp.
$17.50 postpaid
from:
R. R. Bowker Co.
Bowker Fulfillment Dept.
300 N. Zeeb Rd.
Ann Arbor, MI 48106
or Whole Earth

Split Headlines: If the headlines allow themselves to be split by phrases, it is possible to place the phrases in separate positions on the spread, and thereby achieve unexpected results. An even better (because more functional) application of this principle is to allow the headline to flow from one spread onto the succeeding one, thus forcing the reader to realize that the story continues



The size of each picture does not reflect the relative importance of each in the story. So the reader has to discover it through thought and analysis and hard, slow work.

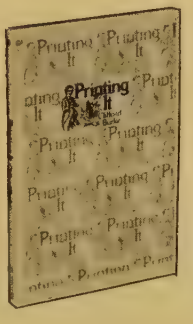


There can be no question in anyone's mind about which picture the editors deemed most important. Not only does the spread communicate more clearly and faster, but it looks better and more dynamic. Yet all the type is in this scheme that was shown in the scheme above.

Printing It

Not much money on hand, and you're gonna make a book? Clifford Burke, an impecunious bookmaking craftsman himself, has the basics bite-size.

—SB



Printing It
Clifford Burke
1972; 127pp.
$3.00 postpaid
from:
Wingbow Press
2940 7th St.
Berkeley, CA 94710
or Whole Earth

The one sound bit of training that will do most to help you prepare good camera-ready paste-ups is the knowledge of what the offset camera can "see." . . . For our purposes in this book the rule is *the camera sees anything black on a white ground*. While this rule is variable, it is also absolute. For example, because of their reflective qualities the camera sees pale blue as white, and it sees red as black. It also sees green thumbprints, red wine stains, and flecks of gray cigarette ash. It sees little white specks in the blackest letter, and rough edges on the most carefully made drawing. In offset printing the camera is the taskmaster, and only after this is learned can laying out "black" copy on "white" paper be really money saving and creative.

The Design of Books

I like this book. You won't learn the tools and techniques here, but you will find ideas of what to do with your knowledge of them—— its focus is on the esthetic aspects of bookmaking, though it includes brief descriptions of the basics of paper, the various printing processes, and typefaces. I find myself going back to it to look at the numerous and diverse illustrations (only b&w unfortunately), from one of the earliest known layouts (a spread from the 1493 Nuremberg Chronicle) to some of Wilson's own theater publications.

—David Henderson

The Design of Books
Adrian Wilson
1967; 160pp.
$4.95 postpaid
from:
Peregrine Smith, Inc.
P.O. Box 11606
Salt Lake City, UT 84111
or Whole Earth

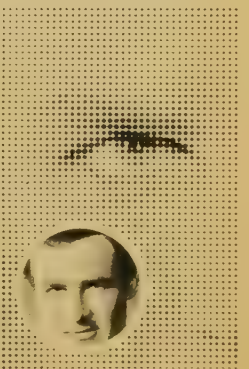
Pocket Pal

History/the printing processes/art and copy preparation/ graphic arts photography/platemaking/printing/binding/ paper/printing inks/graphic arts terms. This tasty book has been around since 1934 and has been continually revised as the printing biz has evolved. **Pocket Pal** *will teach you the language you need to know to keep your local printer from bullshitting you overmuch. You will also learn a healthy respect for his art and the myriad events which transpire in a complicated printing job. Life is a two-way street.*

—E. Todd Ellison
[Suggested by Beth Fairbanks]

Pocket Pal
(A Graphic Arts Production Handbook)
1963; 180pp
$1.00 postpaid
from:
International Paper Co.
220 East 42nd St.
New York, NY 10017

HALFTONE DOTS ENLARGED



(Printing paper merchandisers who handle the International Paper line will often have copies in stock. Talk to a salesman.)

HOW TO RECOGNIZE PRINTING PROCESSES

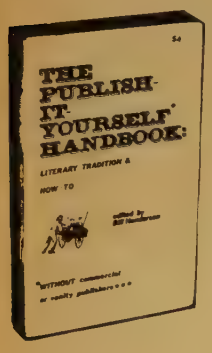
LETTERPRESS (RING OF INK)	GRAVURE (SCREENED TYPE)	OFFSET (SMOOTH PRINT)
A	A	A

widow *In composition,* a single word in a line by itself, ending a paragraph; frowned upon in good typography.

The Publish-it Yourself Handbook

New York is not Publishing. Your home and some work can be. Here are some recent experiences, home-published of course. Damned inspiring. Damned useful.

—SB



The Publish-it Yourself Handbook
(Literary Tradition & How-to)
Bill Henderson, Ed.
1973; 362pp.
$4.50 postpaid
from:
The Pushcart Book Press
Box 845
Yonkers, NY 10701
or Whole Earth

Walt Whitman not only had some artistic know-how, he also knew how to wheel and deal. In 1855 he himself set the type for Leaves of Grass on the press of Andrew and James Rome in Brooklyn: ninety-five pages, twelve poems, somewhat under a thousand books. He got his review copies out and attracted some notice, but he wrote the best reviews himself.

Whitman's reviews appeared in the Brooklyn Times, the American Phrenological Journal, and The United States And Democratic Review. In one of these reviews, Whitman described himself as "of pure American breed, large and lusty, a naive, masculine, affectionate, contemplative, sensual, imperious person."

•

Membership in COSMEP is open to any magazine, press, or newspaper of limited circulation. The majority of the members are literary presses or periodicals. Membership dues currently are fifteen dollars. Additional information can be obtained by writing COSMEP, P.O. Box 703, San Francisco, CA 94101.

•

I then went home and announced to my wife, "We've founded a press." "Oh really," she said, blasé. "What's it called?" I said something bland, like "Shirtsleeves Press." "That's no good," she said. "Call it something else." And I did, "Something Else Press."

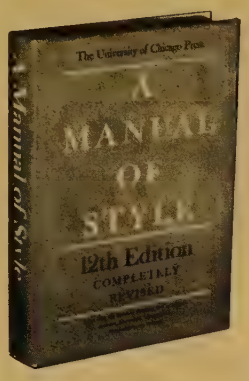
•

Directory of Little Magazines, Small Presses, and Underground Newspapers. Edited by Len Fulton and James Boyer May. Dustbooks (5218 Scottwood Road, Paradise, CA 95969). 8th Edition. $3.50. Best and most comprehensive information about small publishers. Recommended.

A Manual of Style

It's reassuring to know that such time-worn standardization exists, even if your first (and best) instinct is to mischievously deviate from it. Advice on setting the more esoteric and scholarly type (poetry, letters & diaries, "Citing Public Documents"), and helps you completely understand the mysteries of Rights & Permissions (requesting, granting, "Fair Use" common law, etc.). Slick glossary; good reference tool for the whole production crew. If you need to know the correct type face to set your favorite TV serial in, and much, much more, this is your book.

—Pam Cokeley



A Manual of Style
(12th Ed., Rev.)
1969; 546pp.
$10.00 postpaid
from:
The University of Chicago Press
11030 S. Langley Ave.
Chicago, IL 60628
or Whole Earth

The chief reason for any style book, of course, is to ease the work of the writer, the editor, and the typesetter in achieving clarity and consistency within a publication. To say, for instance, that *Congress* is always spelled with an initial capital letter and that the titles of plays are given in italics is to remove two cases from the list of those that must be decided on their own merits—— such decisions to be remembered from the beginning to the end of the work. When style rules go beyond their role of achieving clarity and consistency, when they become precious or merely doctrinaire, they must be changed or eliminated.

•

Gauging the Length of an Index

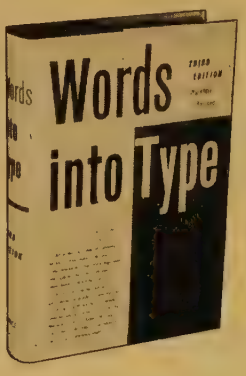
An inexperienced indexer may wish to have guidance on the appropriate magnitude of the index he is undertaking. The desirable length of the index of course will vary according to the nature of the book, scholarly books generally needing longer indexes than popular books. For a typical scholarly book this might be from one-fiftieth to one-twentieth the length of the text. That is, a book of, say, three hundred pages might need an index of from six to fifteen pages, depending upon how closely written the book is. (One page of two-column index generally accommodates about one hundred lines.)

•

Words Into Type

Not a didactic style book, but a tool the copy-editor will find as useful as his photo-blue pencil. Alerts you to the responsibilities each person has to the manuscript (from author to typesetter), making it equally useful to someone on either side of the desk. Concentrates on production methods. . . its strongest chapter deals exhaustively with the composition of type and the reproduction of illustration. Comprehensive copy-editor's guide, some foreign alphabets and abbreviations, strong index, and good browsing too.

—Pam Cokeley



Words Into Type
Marjorie E. Skillin, Robert M. Gay, Eds.
1974; 585pp.
$12.50 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ 07632
or Whole Earth

Terminal prepositions. The terminal preposition, as in "This is the book he told us about," "He is the man I spoke of," is frowned upon by those who do not know the history of English idiom, but has been well established for centuries.

The probably apocryphal child who piled up five ("What did you bring the book that I didn't want to be read out of to up for?") is joined by no less a prose stylist than Churchill ("This is the kind of nonsense up with which I will not put") in defending the construction. "He is the man of whom I spoke" is wooden; "He is the man I spoke of" offends only the pedant. In any case, the copy editor should not create a strained sentence in order to avoid a terminal preposition.

•

This line is set in 6-point
This line is set in 7-point
This line is set in 8-point
This line is set in 9-point
This line is set in 10-point
This line is set in 11-point
This line is set in 12-point
This line is set in 14-point

Observations From the Treadmill

I have never met the publisher-writer-editor who calls himself my *but I have read* Observations from the Treadmill, *and think it is what he claims for it—— a successful one-man journal. He is also one of the very few writers in this country to work with some skill in the field of literary documentary, for while there is enough newspaper reportage in the fields of social realism to pave a superhighway to the moon, almost none of it is sensitive to the recalcitrant nature of reality, the paradoxes of its surface.* my's *virtue it seems to me is that he approaches all the overworked themes of social pathology with a unique stance—— he has arrived at a state of simplicity in listening—— and so does not drown out the voices of his subjects by fitting them into preconceived concepts.* Observations from the Treadmill *contains an extraordinary amount of life in its pages, and none of it appears forced.*

—Norman Mailer

[Viking's hardcover price of $12.95 is ridiculous. And so far no paperback. For my's own periodical form of OFT—— you pay what it's worth to you—— write RFD No. 1, Union, Maine 04862 and send $1.00 to start with.]

Observations from the Treadmill
my
1971; 290pp.
$12.95 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

No. 15. A young woman. Pregnant. Doctor Jim: "C'mon in, fats. I'll be away for a while in Africa, opening a new hospital. We'll have another doctor here next week. Doctor Stanley. A very fine young man. Then my wife Mollie will be here for ten days. She's a very qualified doctor. Looks like one of them will deliver your baby. Unless you're pokey and wait for me. Then ah'll do it."

No. 16. A mother and two small girls, one with a bad earache.

Dr. Jim: "It looks like she's gettin' better. We have two choices. We can let her get well by herself or give her medicine. There's an advantage to lettin' her throw it off herself. See, the body builds up antibodies to fight the infection. Next time she gets the germs, the antibodies will help her fight it off better. Let's do that." Both girls get medicine for worms.

•

As Doctor Jim begins inside, I stand outside. The sun has come out. So has the heat. One car parked out front has three small kids in the back seat. The smallest one cries most of the afternoon. Mom is a patient inside. A man sits on the porch whittling and sneaking glances at the stranger with the cameras. Mountain people are quiet, conservative, suspicious, superstitious, emotional, and easily triggered. There are frequent explosions of violence. Guns are a way of life. Turpin says that the Montagnards in Vietnam have much the same temperament.

I sit down on the porch, three or four feet from the whittler. He rolls a cigarette with tobacco from a can of Prince Albert. Neither one of us speaks. After about ten minutes, his mouth begins to purse up. Finally, without looking up from his whittling, he says in a quiet monotone: "Had ta git a new batt'ry t'is mornin'. T'other one jus' plum' wore out."

That's all. I wait for more. Nothing. So I ask: "How much did it cost?"

A long pause. Then: "Twenty-two dollars with tax."

"That's a lot of money."

Pause. "Yup." He gets up and goes inside.

The Self-Publishing Writer

Grumbling and giving tips to one another.

—SB

The Self-Publishing Writer
Sibley S. Morrill, Ed.
$7.50/yr
from:
The Self-Publishing Writer
P.O. Box 24
San Francisco, CA 94101

A reviewer of the **Publish-It-Yourself Handbook** called self-publishing an ego-trip. It is. But it is not the vanity of vanities press he thinks it. Commercial publication is the pleasure cruise of ego-trips, when a whole crew is working to get your words into print and publicize and distribute your book while you sit on a deckchair in the sun above it all, having your ego waited on—— that is the royal ego-trip. Self-publishing is the ego-trip of sailing your own boat with all the work and risks and no guarantees and having to believe in your own worth without the papal benediction of a publisher.

Rural Mimeo Newspapers

Intended as a guide for starting community papers in developing countries, this tight comprehensive cheap booklet can be used by anyone to help any community identify itself. Fine work.

—SB

Rural Mimeo Newspapers
Robert de T. Lawrence
1965; 42pp.
$1.25 postpaid

from:
Unipub, Inc.
P.O. Box 433
New York, NY 10016
or Whole Earth

Names are the lifeblood of news and nowhere is it more true than in the society story. If there is a big party, festival or funeral, include the names of all the important people, members of the family, etc. The people who went to the affair will want to read about it afterwards. They will look to see if their names are given in the story. Your newspaper will make friends if it uses a lot of names. But if you spell a name wrongly you can make an enemy. So, put many names in your stories, but be sure to spell them correctly.

•

Put *action* into each headline by including a verb. For example, instead of writing a sports head like "Football Game", it is better to say, "Fairville Footballers Beat Pleebo" . . . or, in place of "New School", write "New School Opens in Midland Today".

MAKE-UP

Vol I   Acme Publishing Co   Jonesville, Ark,   April 12   No. 2

Mimeograph Papers Can Put Most Important Story in left-hand Column

This Will Give Space To Complete It On Page One

Daily newspapers ordinarily use the right-hand column for their banner story, and the left-hand column for the second best one. However, because of space limitations in a mimeographed paper, it is often advantageous to reverse this procedure.

Reason? A printed paper has a whole column of fine print—500 words of it or more before it runs out of the column. This of course is not possible in a mimeographed paper. Therefore, by starting on the left side, you have as many as three columns in which to tell your most important story.

If your big story should happen to be a fairly short one, you can complete it in the top part of the second column, and leave room for a double-column spread to give weight to the bottom half of the page.

A recent newspaper article in a Boston paper states that scientific research shows that in spite of the fact that editors place their pictures and leading stories on the right side, reader preference is actually for the left side of the page.

Since this subject is apparently quite controversial, it would seem that both approaches to it should be considered and that the preference of the mimeograph newspaper staff should be the ultimate choice.

Put Short Items Of Importance In Boxes

Announcements to which you want to call attention, but which do not have enough news in them to merit a top head, will stand out if you put a "box" around them, and have the typist copy them in lines two spaces shorter than the usual line.

The box is also used for short, breezy human-interest stories.

USE ITALIC TYPE TO CONTRAST WITH ROMAN FACES

Where two headlines are likely to fall together, either beside each other or one underneath the other, the smaller of the two should be in italic type.

"Italic" is the printer's term for slanting type. He uses "Roman" to designate straight-up-and-down type faces.

Note how the slanting type on the headline to this story contrasts and stands out from the Roman head directly above it.

Now look over in the first column to see how the top head and the secondary head below it (this lower head is known as a "deck") seem to blend into each other, even though they are of different type sizes.

If the boxed item in the middle column had been higher, so that its headline was even with the other two, the effect would have been even more confusing, and the necessity even greater for putting one of the heads in italics. However, in this case the middle head would be in italic, since it would have the greatest need for something to make it stand out from the others which surround it.

A Double Column Headline Gives Weight To The Bottom Of The Page

A double-column headline has two advantages. It is easy to write, since it has room for a lot of words in it. This may permit you to work out a clever head that will catch the reader's attention.

The double-column head (known to make-up men as the "d.c.") is also useful in breaking up the masses of small type that frequently occur at the bottom of the page and give it a flat, dull, uninteresting appearance.

----o----

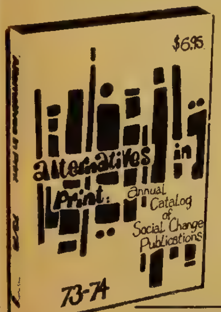
Keep Fillers on Hand

There is nothing more exasperating than a little empty space at the bottom.

Alternatives in Print

800 social-change publishers and their 20,000 publications cross-referenced by subject and organization names. Handy reference for the woolier bookstore or social-change professional. Much of it is The Parts Left Out of **Books in Print**.

—SB



Alternatives in Print
Compiled by Task Force on Alternatives in Print, Social Responsibilities Round Table, American Library Assoc.
1973; 375pp.
$7.30 postpaid

from:
Glide Publications
330 Ellis St.
San Francisco, CA 94102
or Whole Earth

Synectics Education Systems
121 Brattle Street
Cambridge, Massachusetts 02138

The Basic Course in Synectics. Gordon & Poze	$50.00	Strange & Familiar. SES	$5.00
Hang-Up. SES	$15.00	Activities in Metaphor. Gordon & Poze	$5.00
Introduction to Synectics. SES	$2.00	Teaching is Listening. Gordon & Poze	Apply
The Metaphorical Way of Learning and Knowing. Gordon & Poze	$5.00		

-T-

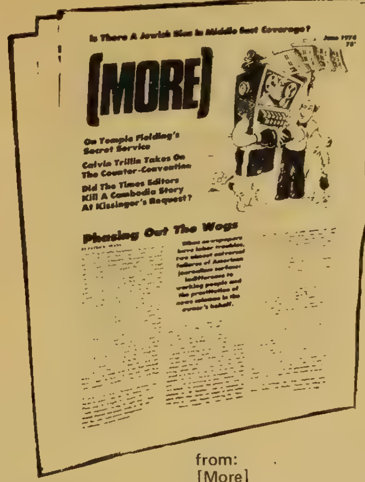
El Taller Grafico
United Farm Workers
Box 62
Keene, California 93531

Basta! (Enough!). Photos by Geo. Ballis	$2.00	So Shall Ye Reap. Joan Candon	$1.75
Huelga: Eugene Nelson	$1.50	RECORD: Huelga Record. Dan & Judy Rose-Redwood	$1.00
Profile: Cesar Chavez. Peter Matthiessen	$ .50	FILM: Si Se Puede. (45 Minutes) Color	Sale: $500.00
Sal Si Puedes. Peter Matthiessen	$1.50	Viva la Causa.	Sale: $325.00
Right to Work Laws. (Spanish also) Bayard & Al Rustin	$ .10	FILMSTRIP & RECORD: Fruit, Vegetables, People. United Methodist Church	$30.00
Journal. Paul H. Sherry	$ .50		

[More]

A journalist's paper that muckrakes the press.

—Dave Potuin



[MORE]
Richard Pollak, Ed.
$10.00 /yr

from:
[More]
P.O. Box 576
Ansonia St.
New York, NY 10023
or Whole Earth

Housewife with terminal yen buys **National Enquirer** at supermarket—— sees Billy Graham at checkout counter, loses ten pounds after spotting UFO on way home and is reunited with her 109-year-old seventh grade math teacher.

•

Rosebuds to **The Southern Patriot** of Louisville, KY., which each month portrays a reality little known to consumers of the major media—— the world of the southern poor. The farm laborer, the poultry worker, the woodcutter, the miner—— their labor struggles in small towns across the south are covered, and actively supported, in the pages of the **Patriot**. There is no pretense here to objectivity—— strikers may tell their own stories, articles regularly solicit reader support, lists of companies to boycott punctuate each issue—but the **Patriot** is noticeably lacking in rhetoric, its advocacy tempered by its quest for facts.

Other Voices

Encouragement and access for the only guaranteed freedom-of-the-press: owning the press. I thought I was fairly hip to what's current in American Indian publishing—— I would have said, well, there's the excellent **Akwesasne Notes**, *(Mohawk Nation, Rooseveltown, NY 13683), and* **Navajo Times**, *and 4 or 5 others. Ha. This book lists 186 American Indian newspapers, with addresses. And similarly for Black and Chicano.*

—SB

Other Voices: Black, Chicano, and American Indian Press
Sharon Murphy
1974; 132pp.
$3.50 postpaid

from:
Pflaum/Standard
38 West 5th St.
Dayton, OH 45402
or Whole Earth

NORML ad rejected by *Time* and *Newsweek*

The Paper Trip

How to mess around with your official identity by messing around with the official documentation that represents you to the system. Ultimate vanity-press. The same author has a booklet on establishing credit.

—SB

The Paper Trip
Barry Reid
1971; 28pp.
$5.95 postpaid

from:
Eden Press
Box 866
Westminster CA 92683
or Whole Earth

THE PAPER TRIP never recommends using government ID that is NOT issued by the various agencies themselves. Forget using phoney birth certificates, stolen Social Security cards, doctored driver's licenses and purloined passports. They're not worth the paper they're printed on, and are absolutely worthless for disappearing. The trick is to have the government issue you DIRECTLY the various forms of ID you need. And all the information you need to get started is on a regular birth certificate—— someone else's, that is.

But who is this "someone else"? Obviously it can't be someone who is now living, since you would be duplicating an existing set of ID, which could lead to an early and easy detection. The "someone else" must, then, be a person of your sex, race, and approximate age who is no longer living and thus has no further need of ID under his name. The problem lies in finding such a person and ultimately obtaining his birth certificate.

More Printing Equipment

(See Pg. 360.)

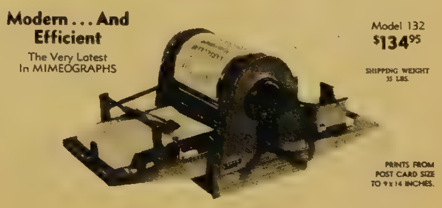
Good prices on direct mailorder mimeographs ($134-200) from:

Vari-Color Duplicator Company
435 South Lincoln
Shawnee, OK 74801

Used printers supplies available from:

Turnbaugh Printers Supply Co.
104 Sporting Hill Rd.
Mechanicsburg, PA 17055

—SB

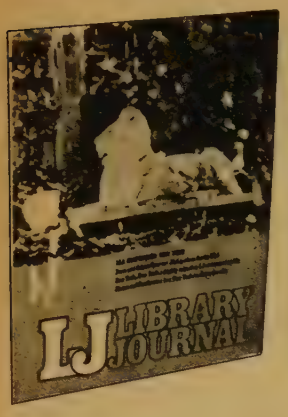


COMMUNICATIONS

Library Journal

Simply the best periodical on books in America. Best reviews, widest coverage, least nonsense. To stay current in any field I'd call it essential.

—SB



Library Journal
John N. Berry III, Ed.
$16.20 /yr
from:
Library Journal
R.R. Bowker Co.
300 North Zeeb Rd.
Ann Arbor, MI 48106

Hall, Laurence & others. **New Colleges for New Students.**

Jossey-Bass. (Series in Higher Education). 1974. 210 p. index. LC 73-10933. $8.75.

As pedagogic travelogues go, this national guided tour of nontraditional configurations for new college-level learners is a fine trip. The variations for effective education studied are designed to attract and retain particular kinds of students—— minorities, women, blue-collar—— that traditional, elitist universities have heretofore ignored or doomed to systematic failure. Hall stops at 16 diverse and provocative landmarks—— including the Malcolm-King Harlem College Extension, the Chicago TV College, and the Rural Family Development Project—— combining reportage with often excellent commentaries on creative and responsive approaches that reflect substantial educational reforms and transformations. College libraries please take note.—— *Shelley Neiderbach, Learning Center, Jersey City State Coll., N.J.*

•

Pond, Barbara. **A Sampler of Wayside Herbs: rediscovering old uses for familiar wild plants.**

Chatham, dist. by Viking. 1974. 126 p. illus., some color, bibliog. index. LC 73-89773. $17.50.
Folklore/Botany

A selective and elegant treatment of nearly 100 familiar wayside plants, weeds, and herbs. Watercolor paintings of the herbs, temptingly suitable for framing, are generously interspersed with an accurate, humorous text. These common weeds are not only beautiful, but have a long and venerable ancestry in medicine, ceremony, symbolism, and history. The vignettes throughout are good (for example, Pond notes that the Romans were in the habit of toasting Bacchus with violet wine, then wearing garlands of violets the morning after to soothe their throbbing craniums). Though this book is not encyclopedic, it should give much pleasure to casual readers.—— *Patricia Goodfellow, Leaside P.L., Toronto, Ontario, Canada.*

The Federal Information Center

For once (I'm glad to say) there is a governmental agency that knows what it is doing. These people are so fast at finding information that I have been unable to receive their answer. . . I was so flabbergasted. They are fast, extremely curteous, and accurate. This is like a phone-in Whole Earth Catalog. One time I called the Los Angeles City Hall to find out where the county was going to present their sewer proposal to the South Coast Regional Planning Commission (whew!). After being transferred around about twenty times I gave up and called the FIC. . . BINGO, they had it. They will frequently take your number and, after researching a question, call you right back. Saves on the phone bill. I think they deserve peonies of praise. . . Write to General Services Administration, Washington DC 20405 for brochure giving FIC office nearest you.

Scott Bryson
Malibu, CA

Toxline

A computer-search service of the scientific literature on a range of environmental subjects is available from Leonard L. Lewis, 2560 Hilgard Ave., Berkeley, California 94709 (415) 666-2397. Peter Warshall reports: "Concerned with the side effects of a herbicide used near-by, I asked Mr. Lewis to produce a Bibliography on the chemical. It was amazing! Good references with abstracts. Saved hours of time. If your request is very extensive, he may have to ask for a contribution. My print-out took about 30 seconds and was 150 pages."

Encyclopaedia Britannica

The new **Britannica's** *vital statistics are impressive: 15 years in preparation, 160lbs., 43 million words, 33,141 pages, $32 million to develop (excluding printing). Fortunately, the contents are impressive, as well. Don't be put off by the high-sounding titles of the three sections into which the 30 volumes are divided—— this new format works well. The Micropaedia (Ready Reference & Index) carries a comprehensive set of 102,000 shorter articles; 40,000 of these entries are cross-referenced to longer articles in the Macropaedia (Knowledge in Depth). The Propaedia (Outline of Knowledge) is a one-volume study guide which classifies human knowledge within ten categories, then subdivides the topics within those basic areas. It is a highly organized index to the information in the Micropaedia and Macropaedia—— a great aid in exploring a subject in depth and on through its related fields. In fact,* **"Britannica 3"** *has been conceived as a tool for teaching oneself, in a systematic way, the range of man's accumulated knowledge. It is still the definitive reference work—— a worthy successor in a proud line.*

The **Britannica** *regularly retails in a standard binding at $598 plus tax and shipping, which includes a bookcase and several other reference works. As a person having an association with an educational institution, I purchased the set in library binding, without the bookcase and additional publications, for $348. Yearly updates will also be available.*

—DH

Encyclopaedia Britannica
15th Edition; 30 volumes

Encyclopaedia Britannica, Inc.
425 N. Michigan Ave.
Chicago, Illinois 60611

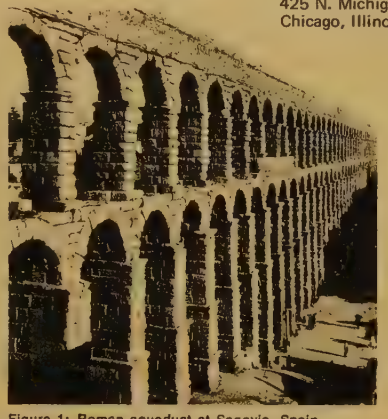


Figure 1: Roman aqueduct at Segovia, Spain, probably built under Trajan (c. AD 100–110). Still in use, the 2,700-foot structure carries water from the Río Frío to the city of Segovia.

Copulation in oligochaetes is reciprocal—that is, both sperm and eggs are exchanged—and takes place in a head to tail position, with the two ventral surfaces in contact (see Figure 2). In lower oligochaetes, the male

From W. Kukenthal and T. Krumbach (eds.), *Handbuch der Zoologie*; by permission of Walter de Gruyter, Berlin-New York

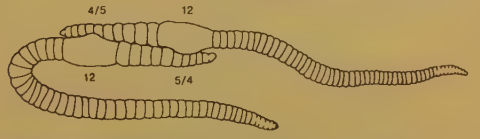


Figure 2: *Enchytraeus albidus* in copulation, the male pore, on segment 12, being directly opposed to the spermathecal pore of the other worm, between segments 4 and 5.

Cream Rises
REFERENCE

Finding Facts Fast *Outstanding guidebook* 683
Encyclopaedia Britannica *Completely new* 682
Library Journal *Best reviews* 682
Publisher's Weekly *Book trade* 436
AAAS Science Books *Widest science reviews* 364
Crafts Books *Craft reviews* 546
The Reader's Advisor *Best in-print books* 364
The Compact Oxford English Dictionary *Logophile heaven* 685
Conservation Directory *Environmental groups* 467
Origins *Word derivations* 685
A Manual of Style *English written usage* 680
Times Atlas of the World *Best atlas* 9
Goode's World Atlas *Best buy* 459
Man's Domain *Cheapest atlas* 9
Thomas Register *American Manufacturers* 130
A Treasury of Traditional Wisdom *Mystical reference* 456
The Film-Goers Companion *Total movie reference* 693
Alternatives in Print *Wilder Books-in-print* 681
Black Interest *Basic black info* 622-625

Books-By-Phone

"You can call 800-645-9040 free, 24 hours a day, 7 days a week, and order any book in print." That's the claim. . . The limits seem to be the listing, **Books in Print**, by Bowker. Funkier items will still have to be ordered directly from the various publishers.

Billing is on your Master Charge, Bankamericard, American Express, or Diner's Club. They also accept checks. You will be charged the retail price of the books plus $1.00 per order. NOT PER BOOK. PER ORDER.

I was not "notified promptly" when they found that two other books (not listed) were not in stock at the publishers' warehouses, and eventually called after waiting three weeks for some word.

Here is where a very redeeming feature showed up. Every time I have called to check on any order, the people have been friendly, loose, even chatty. AND! The records were always close-at-hand, and complete. No one ever ran into any delay or confusion while checking the status of the orders.

Conclusion: I was going to recommend them for "straightforward items." Try them for anything. They'll tell you if they can get it. Often, you can call back in thirty minutes and ask for the person you talked to and check whether or not they can get what you ordered.

Rick Wannall
Terra Facts
Freeport, Texas

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Jacksonville, IL 62652

Just remembered that H—NM sell sets of paperbacks by subjects (Sociology, Black History, etc.), all bound up into the hard covers. Though their market is the library, you can get a catalog and ask if they will sell single titles from among those already bound. You might save time and not have to buy a minimum number.

—Rick
Freeport, TX

Finding Facts Fast

My guess is that Todd didn't choose that Godawful title, because he does everything in the text just right. A basic handbook for laymen, has beautiful 2 and 3 page descriptions of how to treat hundreds of problems in research from very elemental to very advanced levels. From "Finding the Right Library" to "Government as an Information Source" to "Oral History Collections" and "Obtaining Out-of-Print Books." Everytime I get lost in the world of information I use Todd to ground me.

—Richard Green

Of all the lists of reference books available, I find the most useful and best edited is **Reference Books: A Brief Guide** (pub. by Enoch Pratt Free Library, 400 Cathedral Street, Baltimore, Md. 21201). This 158-page paperback costs $1.25.

•

A Low-Cost Home Reference Collection

In steering a course between wasting time and wasting money, I have found that it pays to buy a certain number of inexpensive reference books so that I can have them right on my desk, and to consult others in the library. Of course, each researcher discovers his own needs and use patterns, and each buys reference materials of particular value to him. But for general use I suggest this short list of reference books:

1. **The World Almanac.** Published annually for a century, this is the standard American book of facts from which others (such as the **Information Please Almanac** and **The New York Times Encyclopedic Almanac**) were derived. Sold at newsstands in soft cover, it is the best available compilation of specific information in many fields, and has been at the right hand of thousands of newspaper editors for decades. The strength of the **World Almanac** lies in its excellent index, which includes both general subject headings and specific names. Every house and office should have this time-saving reference book. So should every student, from high school through the doctoral degree candidate.

Libraries

You don't have to buy any of the books listed in the **Epilog** *or* **Catalog.**

Your local library can borrow any book they do not carry through the inter-library loan system. Many people are not aware of this service. Thelma Percy, our local librarian says often a person will come in, ask for a book, and she'll reply. "We don't have it, but we can get it for you."

"You can?"

You may have to wait a few weeks and pay postage, but it's a way to see books you're not sure of, or can't afford. An outstanding service of the American library system, which, as Mrs. Percy says, is the best in the world.

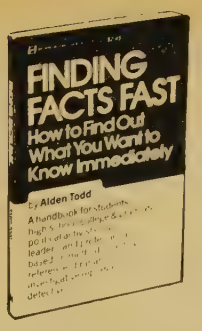
NOTE TO LIBRARIANS: why not set up a Whole Earth section in your library? Composed of all the books in the **Epilog** *and* **Catalog.**

—Lloyd Kahn

2. **Congressional Directory.** Published in hard cover after every biennial Congressional election, and revised semiannually between elections, the **Congressional Directory** is the definitive guide to the resources of American federal government. Most space is devoted to Congress and its committees, but there are also lists of federal courts and judges, and of agencies and officers of the Executive branch of government. From the Executive branch pages you can find name, address, telephone number, organizational structure and public information officer of an agency from which you seek help in research.

After a Congressional election and pending the appearance of a a new edition (in late spring in odd-number years), you can clip a newspaper or magazine summary of election results and use it as a temporary correction sheet, at least for the names of new members of Congress.

Now See:
Government as an Information Source (p. 49)
Government Printing Office (p. 51)
Your Congressman Can Help (p. 54). . . .



Finding Facts Fast
(How to Find Out What You Want to Know Immediately)
Allen Todd
1972; 108pp.
$2.45 postpaid
from:
William Morrow & Co.
Wilmot Warehouse
6 Henderson Dr.
West Caldwell, NJ 07006
or Whole Earth

6. **National Geographic Society Maps.** Rather than invest in an expensive bound atlas that is soon outdated by the formation of new states, and by new settlements in the Arctic and Antarctic, I collect the loose, folded maps inserted every few months in the **National Geographic Magazine.** Over the years this collection has become my self-updating atlas, measuring four inches across as the folded maps stand on the shelf. I bind together the maps of each continent with a rubber band, and can easily find the map I need within a minute. For accuracy of place names, clarity and precision in cartography, and quality of printing the National Geographic Society maps are unsurpassed in the United States.

. . . 9. *Your trade or professional directory* (if any). There are hundreds of directories and annuals published for the reference use of people engaged in the same general business or professional activity. Sometimes these books are known as "the Bible of the industry." Depending on price and frequency of use, an individual can decide for himself whether it pays to buy his own copy or to use it in a library. Many directories and annuals carry paid advertising, which helps the publisher to bring the price down and gain a greater circulation. When undertaking research for the first time in a given business or professional field, you should become familiar at once with the standard reference work (or works) and acquire it if need be.

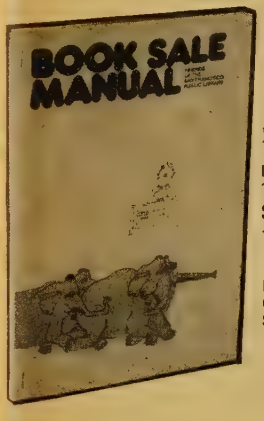
Now See:
Search Out the Trade Press (p. 74)

•

Book Sale Manual

Raising money by selling other people's used books in a big book fest. How to.

—SB



Book Sale Manual
Elaine Mundy & Richard Reinhardt
1974; 34pp.
$3.00 postpaid
from:
Friends of the San Francisco Library
Main Library
Civic Center
San Francisco, CA 94102

FRIENDS OF THE SAN FRANCISCO PUBLIC LIBRARY CIVIC CENTER

We are now collecting books and records for our tenth annual Book Sale in April. Won't you help the Library by making a contribution which our volunteer will pick up

(THIS COMING FRIDAY)

Cook books, art books, travel, poetry, drama and children's books are in particular demand at the Sale. Please leave your donation where our driver can see it from the street. We will leave a tax-deductible form for you to fill out.

If you have unwanted books in the future, please drop them in the Friends' barrel at your nearest branch library. Large or valuable donations can be picked up by arrangement.

We do not take popular magazines, Readers' Digest condensed books, old texts or battered books.

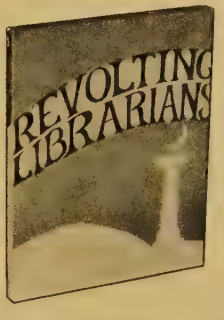
THANK YOU THANK YOU THANK YOU

Hundreds of volunteers and a few paid employees worked with energy and enthusiasm to make the Friends' Book Sale the largest and most profitable fund-raising event in the history of the San Francisco Public Library. Thousands of other Bay Area residents contributed to this success as donors or purchasers of books. More than a fund-raiser, the Book Sale offers a vast array of bargains to book lovers; it brings the Library to the attention of the entire community; and it provides entertainment for the whole family.

Revolting Librarians

Libraries are a Good. This book and the periodicals **Booklegger Magazine** *(Suggested by Laurel Osborne and Ed Morman) and* **Sipapu** *are by and for the youthful workers looking to make libraries a Better.*

—SB



Revolting Librarians
Célest West, Elizabeth Katz, et al
1972; 158pp.
$2.00 postpaid

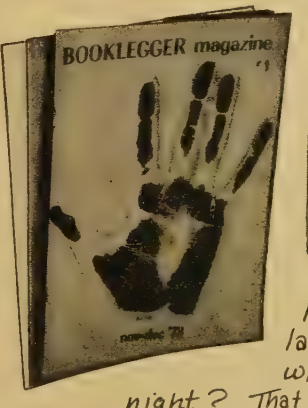
Booklegger Magazine
$8.00 /yr

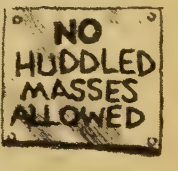
both from:
Booklegger Press
72 Ord St.
San Francisco, CA 94114
or Whole Earth

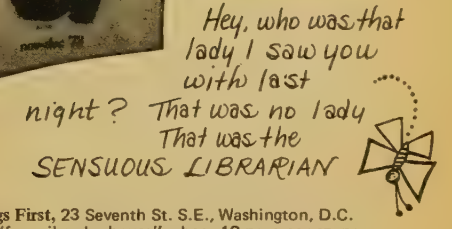
Sipapu
$2 /yr (2 issues)
free to prisoners, exchange papers, & library school students.
from:
Route 1, Box 216
Winters, CA 95694

In the library we constantly faced this in the distinctions made between "professional" and "non-professional." These distinctions usually have little legitimate basis. We have often encountered "professionals" and "non-professionals" whose responsibilities were identical, but there still existed that differential in status (which, of course, was reflected in pay). Worse yet, are the instances where a "non-professional" who may have been working in a department for 10 years is subordinate to a "Professional" fresh out of Library Science school who has never worked in a library. Last year the supervisor of a department in a library we have been working with resigned unexpectedly. The rest of the department was made up of non-professional, support staff members. They ran the department by themselves for 3 months until the supervisor could be replaced. From this experience they learned that they were actually able to run their own department in a spirit that was non-authoritarian, challenging, and much less alienating.

—Booklegger







First Things First, 23 Seventh St. S.E., Washington, D.C. 20003. A "fe-mail order house" whose 12 page newspaper catalog is a complete blueprint for a collection: fiction, non-fiction, children's lit, pamphlets, posters. From old treasures to feminist publishing collectives' latest, distributor Susan Sojourner's got it all.

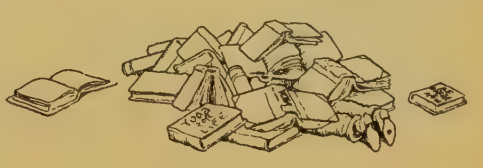
•

I've got nothing against silence. Some of my best friends are silent. I've got nothing against it except what it's done to the image of libraries and librarians: it has WASTED us!

—Revolting Librarians

The list of books simply rejected when requested staggers my memory. The best-known that I recall was the **Last Whole Earth Catalog,** now a bestseller, and we still don't have it, apparently because it has four-letter words in the text. (At last count the library had 8 copies of **Portnoy's Complaint** and 10 of **The Love Machine.**)

—Revolting Librarians



Yellow Pages

As Bill Mergano reminded us, no research reference book matches the yellow pages of the telephone book. On any subject you can browse and call, ask for who else knows about what you know, and proceed to the heart of any matter. If you need phone books outside your area, Mother Bell will provide.

—SB

Gravity's Rainbow

It took America's best book reviewer, Philip Morrison at **Scientific American** *to bring my reluctant attention to this most ambitious novel of Thomas Pynchon's. It became a book I lived in for months. Occasionally I put the book down to applaud, or stare amazed at a wall or ceiling while some perverse scientific insight sank in—— or some shock of identification of Pynchon's late-World-War II stateless European "zone" with the forthcoming lineaments of chaos, amid which heavings of control systems all is Plot, vast conspiracy, the kind of paranoid heaven that Nixon must live in. It is an adventure book, a victim's book, a revolutionary technological treatise (*"**Gravity's Rainbow** *is the parabolic path of a V-2 rocket from Peenemunde to London; the chief villain is an experimental Pavlovian behaviorist; the major quarry is a vicious fleshlike plastic, Imipolex G.")*

Tour de force.

—SB

Gravity's Rainbow
Thomas Pynchon
1973; 887pp.
$2.50 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

But now and then, players in a game will, lull or crisis, be reminded how it is, after all, really play—— and be unable then to continue in the same spirit. . . . Nor need it be anything sudden, spectacular—— it may come in gentle—— and regardless of the score, the number of watchers, their collective wish, penalties they or the Leagues may impose, the player will, walking deliberately, perhaps with Katje's own tough, young isolate's shrug and stride, say *fuck it* and quit the game, quit it cold. . . .

▪

The straight-ruled boulevards built to be marched along are now winding pathways through the waste-piles, their shapes organic now, responding, like goat trails, to laws of least discomfort.

•

If there is something comforting—— religious, if you want—— about paranoia, there is still also anti-paranoia, where nothing is connected to anything, a condition not many of us can bear for long.

•

"Temporal bandwidth" is the width of your present, your *now*. It is the familiar "Δt" considered as a dependent variable. The more you dwell in the past and in the future, the thicker your bandwidth, the more solid your persona. But the narrower your sense of Now, the more tenuous you are. It may get to where you're having trouble remembering what you were doing five minutes ago, or even—— as Solthrop now—— what you're doing *here*, at the base of this colossal curved embankment. . . .

•

Where you cannot feed, you take away weapons. Weapons and food have been firmly linked in the governmental mind for as long as either has been around.

▪

Personnel are weaving back up the main tunnel with a glassy and rubicund look to their faces. Slothrop squints down into this long pit, and makes out a crowd of Americans and Russians gathered around a huge oak beer barrel. A gnome-size German civilian with a red von Hindenburg mustache is dispensing steins of what looks to be mostly head. Ordnance smoke-puffs flicker on nearly every sleeve. The Americans are singing

Rocket Limerick

There once was a thing called a V-2,
To pilot which you did not need to——
You just pushed a button,
And it would leave nuttin'
But stiffs and big holes and debris, too.

The tune is known universally among American fraternity boys. But for some reason it is being sung here in German Storm Trooper style: notes clipping off sharp at the end of each line, then a pulse of silence before the attack on the next line.

[Refrain:]

Ja, ja, ja, ja!
In Prussia they never eat pussy!
There ain't hardly cats enough,
There's garbage and that's enough,
So waltz me around again, Russky!

•

Some Characteristics of Imipolex G

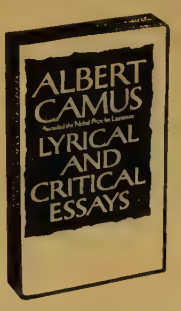
Imipolex G is the first plastic that is actually *erectile*. Under suitable stimuli, the chains grow cross-links, which stiffen the molecule and increase intermolecular attraction so that this Peculiar Polymer runs far outside the known phase diagrams, from limp rubbery amorphous to amazing perfect tessellation, hardness, brilliant transparency, high resistance to temperature, weather, vacuum, shock of any kind (slowly gleaming in the Void. Silver and black. Curvewarped reflections of stars flowing across, down the full length of, round and round in meridians exact as the meridians of acupuncture. What are the stars but points in the body of God where we insert the healing needles of our terror and longing? Shadows of the creature's bones and ducts—— leaky, wounded, irradiated white—— mingling in with its own. *It* is entangled with the bones and ducts, its own shape determined by how the Erection of the Plastic shall proceed: where fast and where slow, where painful and where slithery-cool. . . whether areas shall exchange characteristics of hardness and brilliance, whether some areas should be allowed to flow over the surface so that the passage will be a caress, where to orchestrate sudden discontinuities—— blows, wrenchings—— in among these more caressive moments).

▪

Lyrical and Critical Essays

Albert Camus is remembered for being French, existential, a novelist, and against capital punishment. Fine. Use him at his best : an essayist.

—SB
[Suggested by Bruce Wyman]



Lyrical and Critical Essays
Albert Camus
1967; 365pp.
$1.95 postpaid
from:
Vintage Books
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

While the Greeks used reason to restrain the will, we have ended by placing the impulse of the will at the heart of reason, and reason has therefore become murderous. For the Greeks, values existed a priori and marked out the exact limits of every action. Modern philosophy places its values at the completion of action. . . Excess is a fire, according to Heraclitus. The fire is gaining ground; Nietzsche has been overtaken. It is no longer with hammer blows but with cannon shots that Europe philosophizes.

Nature is still there, nevertheless. Her calm skies and her reason oppose the folly of men. Until the atom too bursts into flame, and history ends in the triumph of reason and the death agony of the species. But the Greeks never said that the limit could not be crossed. They said it existed and that the man who dared ignore it was mercilessly struck down. Nothing in today's history can contradict them.

Great Translations?

The Fitzgerald translation of **Homer**, *the Putnam translation of* **Don Quixote**, *the Wilhelm-Baynes translation of the* **I Ching**—— *and who else?*

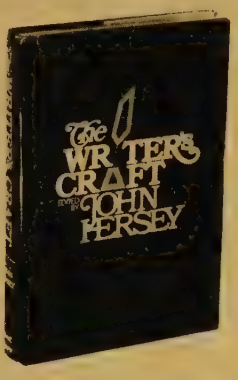
What are the standard or classic translations of, mm, The Great Works? What are hot new ones? What are your heart-felt favorites? Write us. Be paid for your contribution to a "Great Translation" compendium in **The CoEvolution Quarterly**.

—SB

The Writer's Craft

A writer (John Hersey) collecting the writings of other writers (Faulkner, Cummings, Conrad, Kipling, Solzhenitsyn, Mailer, Gorky, Ellison, etc) on writing. A craft examining itself. Admirable selections.

—SB



The Writer's Craft
John Hersey, Ed.
1974; 422pp.
$5.95 postpaid
from:
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

I have, myself, one simple rule, which is to write it only when it is hot, and always stop before it cools off so I will have something to go back to; never to write myself out. But there is somewhere, whether you realize it or not, there is the policeman that insists on some order, some unity in the work. But I would say to never force yourself to write anything. Once you do that you begin to think, "Well, I might as well force myself to write something and make a little money out of it." And then you are sunk—— you are gone, you have stopped being a writer. You must be an amateur writer always.

—Faulkner

•

In Russian, proverbs about *Truth* are favorites. They persistently express the considerable, bitter, grim experience of the people, often astonishingly:

One Word of Truth Outweighs the World.

On such a seemingly fantastic violation of the law of the conservation of mass and energy are based both my own activities and my appeal to the writers of the whole world.

—Solzhenitsyn

•

I think that words are an around-the-world, ox-cart way of doing things, awkward instruments, and they will be laid aside eventually, probably sooner than we think. This is something that will happen in the space age. Most serious writers refuse to make themselves available to the things that technology is doing. I've never been able to understand this sort of fear.

—Burroughs

Style

A great long good harrumph about American misuse of language. And some lines to trenchant proper use.

—SB

Style
(An Anti-Textbook)
Richard A. Lanham
1974; 142pp.
$6.95 postpaid
from:
Yale Univ. Press
302 Temple St.
New Haven, CT 06511
or Whole Earth

We possess no calculus of misunderstandings. "Failure of communication," our cant term for all occasions, often masks simple vacancy of mind. A student writes on an examination paper, "Abuses in the Church troubled Martin Luther beyond belief." Does the fault lie with language or the mind?

•

All that we have now is a growing sense of muddled language, public and private. To this, those of us who teach prose will want to add an awareness of growing student ineptitude that it might not be too strong to call chilling. When I started teaching ten years ago, freshman writing was incorrect and misspelled. Now it is mindless.

•

Our national conversation resembles a spastics' convention where everyone says "You know?" and nobody knows. Our political utterance is congested with what my research assistant, in an inspired typographical error, rendered as "Eisenhoweverese." Our sentimental mass democracy denies the very idea of standards. Everybody just lets it all hang out. We reduce ourselves to machines with an electronic slang of "plugged-in" and "turned-on." The New Left, like the Hitler Right, addicts itself to tantrum prose. We are suffering from a ludicrous case of national euphemism.

•

Hunger for style may explain the contribution that blacks are making to the American campus. Rich in style, their slang now seems destined to capture the straight culture as it captured the hippie one. Raw, brutal, intensely metaphorical, it feeds the hungers that scientific prose starves. Since nobody has trained them in the scientific attitude, black Americans have never lost the sense of play with words.

•

We move easily from style as ingratiation to Whitehead's drumroll, "Style is the ultimate morality of mind" (*Aims of Education*, Pg. 24). We might argue that the underpinning of morality, the feeling for right behavior, is as much aesthetic as moral judgment. Prose style exercises, and can exorcise too, our range of possible behavior. By allowing the luxury of imaginative rehearsal, it confers real ethical choice, and to this extent frees us from necessity. Ethics at this point touches taste, indeed becomes it.

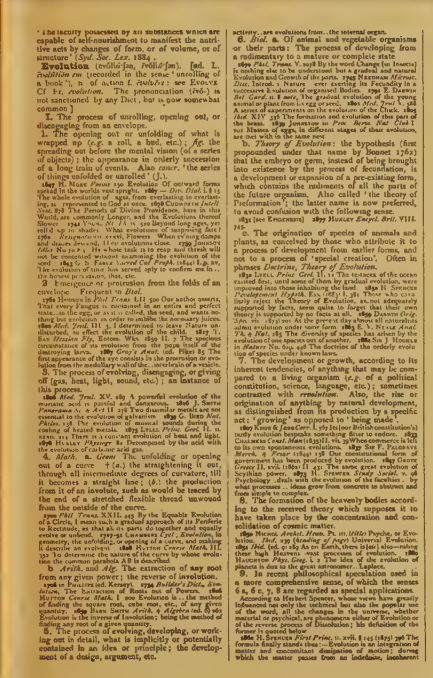
The Compact Edition of the Oxford English Dictionary

Not a bad deal for a home reference—— in magnifying glass size the entire 12-volume 1933 OED. Words in literary usage, contexts shimmering down the generations.

—SB

The Compact Edition of the Oxford English Dictionary
1971

$75.00 postpaid
from:
Oxford Univ. Press
16-00 Pollitt Dr.
Fair Lawn, NJ 07410



[This sample actual size, slightly degraded in reprinting]

Origins

Once you start watching what you are saying you begin to learn what else you are saying. Those words all have lives of their own, their own bizarre pasts and kinships and contained other usages. Find in this classic the meaning behind your meaning.

—SB
[Suggested by Scott Beach]

Origins
(A Short Etymological Dictionary of Modern English)
Eric Partridge
1958, 1962; 970pp.

Out of print! Restore it, someone. Meanwhile, check your library.

whole, whence **wholly**—cf **whole cloth (out of), wholemeal, wholesale, wholesome; hail,** v, and **hale,** adj; **heal** (whence **healer** and pa, vn **healing**)—**health,** whence **healthful, healthless** (obsol), **healthy** (whence **healthiness**).

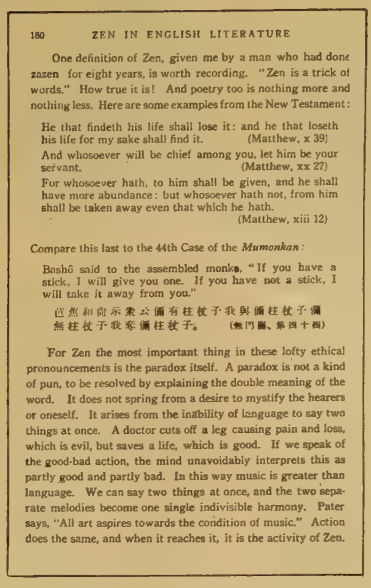
1. The n *whole* derives from the adj *whole*, ME

Zen in English Literature and Oriental Classics

One of the strangest books alive, a genuine hybrid of East and West and robust as hell for it. Blyth's Zen has been deemed limited, but his selector's and translator's eye is unsurpassed, and a form of literary analysis emerges that has spark. Nowhere else have I seen Robert Louis Stevenson's mystical story "The Poor Thing". I think this is an ideal book for someone who is just starting to read seriously (for more, see Pg. 733).

—SB

Zen in English Literature and Oriental Classics
R. H. Blyth
1960; 446pp.
$2.45 postpaid
from:
E.P. Dutton & Co. Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth



180 ZEN IN ENGLISH LITERATURE

One definition of Zen, given me by a man who had done zazen for eight years, is worth recording. "Zen is a trick of words." How true it is! And poetry too is nothing more and nothing less. Here are some examples from the New Testament:

He that findeth his life shall lose it: and he that loseth his life for my sake shall find it. (Matthew, x 39)

And whosoever will be chief among you, let him be your servant. (Matthew, xx 27)

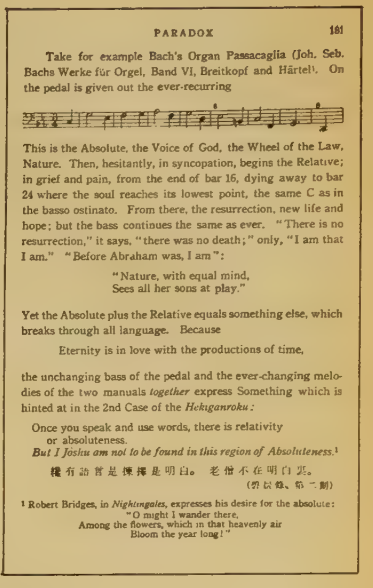
For whosoever hath, to him shall be given, and he shall have more abundance: but whosoever hath not, from him shall be taken away even that which he hath. (Matthew, xiii 12)

Compare this last to the 44th Case of the *Mumonkan*:

Bashō said to the assembled monks, "If you have a stick, I will give you one. If you have not a stick, I will take it away from you."

直煞和尚示衆云儞有柱杖子我與儞柱杖子儞無柱杖子我奪儞柱杖子。 (無門關、第四十四)

For Zen the most important thing in these lofty ethical pronouncements is the paradox itself. A paradox is not a kind of pun, to be resolved by explaining the double meaning of the word. It does not spring from a desire to mystify the hearers or oneself. It arises from the inability of language to say two things at once. A doctor cuts off a leg causing pain and loss, which is evil, but saves a life, which is good. If we speak of the good-bad action, the mind unavoidably interprets this as partly good and partly bad. In this way music is greater than language. We can say two things at once, and the two separate melodies become one single indivisible harmony. Pater says, "All art aspires towards the condition of music." Action does the same, and when it reaches it, it is the activity of Zen.



PARADOX 181

Take for example Bach's Organ Passacaglia (Joh. Seb. Bachs Werke für Orgel, Band VI, Breitkopf and Härtel). On the pedal is given out the ever-recurring

This is the Absolute, the Voice of God, the Wheel of the Law, Nature. Then, hesitantly, in syncopation, begins the Relative; in grief and pain, from the end of bar 16, dying away to bar 24 where the soul reaches its lowest point, the same C as in the basso ostinato. From there, the resurrection, new life and hope; but the bass continues the same as ever. "There is no resurrection," it says, "there was no death;" only, "I am that I am." "Before Abraham was, I am":

"Nature, with equal mind,
Sees all her sons at play."

Yet the Absolute plus the Relative equals something else, which breaks through all language. Because

Eternity is in love with the productions of time,

the unchanging bass of the pedal and the ever-changing melodies of the two manuals *together* express Something which is hinted at in the 2nd Case of the *Hekiganroku*:

Once you speak and use words, there is relativity or absoluteness.
But I Joshu am not to be found in this region of Absoluteness.[1]

種有語言是應機是明白。老僧不在明白裏。
(碧巖錄、第二則)

[1] Robert Bridges, in *Nightingales*, expresses his desire for the absolute:
"O might I wander there,
Among the flowers, which in that heavenly air
Bloom the year long!"

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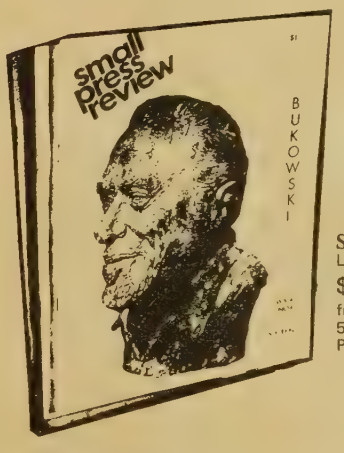
—SB
[Suggested by R. Green]



Bukowski is the image, magnified, of every last man of us, mirrored in hard honesty like a punch in the mouth is hard and honest. It's a tough image to take, but if we don't "face our hate again" and find "the magic to work thru" we will exterminate ourselves.

He snorts like a mean old stud horse who's run too many races for no purse, and whose red eye is on the flimsy fences round the track in which he's supposed to run. He sees the sashaying fillies in the paddock beyond.

Don't put your money on him.

Just dig the race.

—Len Fulton

WHOLE COSMEP CATALOG

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LITERARY MAGAZINES OF AFRICA

The two major journals are still **Transition** and **Black Orpheus.** The patriarchal **Presence Africaine** is now available in English editions but it has always set up French Africa as the major priority of its concerns. **Transition,** brilliantly, imaginatively, occasionally even a little eccentrically, edited by Rajat Neogy is simply the best African magazine.

•

Writer's Access

There was a definite lack of information on the writing of fiction in **The Last Whole Earth Catalog** and I would like to remedy that. This is one of the most portable professions around. You can write anywhere, under just about any conditions, and your initial investment in tools is dirt cheap—— a pencil and paper. . .

Most public libraries subscribe to the two writer's magazines, **The Writer** and **Writer's Digest,** and have an assortment of books on writing. If they don't, I have found it fairly easy to talk the librarians I have come in contact with into ordering the ones I wanted. I've formulated a theory that almost every librarian is a frustrated writer and, for that reason, is eager to read the same books I am. . .

. . .**The Writer's Yearbook** is a magazine published once a year by the Writer's Digest people, 9933 Alliance Road, Cincinnati, Ohio 45242. The current issue is $1.50. They list the top 500 markets for articles, fiction, poetry, and cartoons. Most of the information is available elsewhere. If you have access to a current **Writer's Market,** don't bother with **The Writer's Yearbook.** . . .

. . .**The Writer on his own** by David Greenhood, University of New Mexico Press, Albuquerque, 1971. 206pp. . . .

. . .**Writing Popular Fiction** by Dean R. Koontz, published by Writer's Digest, Cincinnati, 1972. $6.95 232pp. . . .

. . .**Writer's Market '74,** Writer's Digest, edited by Jane Koester and Rose Adkins, Cincinnati, 1973. 910pp. Issued yearly.

The freelance writer's bible. It lists 5178 paying markets for novels, stories, fillers, plays, articles, gags, verse, and photos. You won't use it every day, but when you need it it's indispensible. Most libraries have the current year's copy in their reference section. . . .

. . .**The Writer,** published monthly by The Writer, Inc., 8 Arlington St., Boston, Mass. 02116. $8.00 a year. . . .

. . .**Writer's Digest,** 9933 Alliance Road, Cincinnati, Ohio 45242. Published monthly. $5.95 a year.

Second-best. Recently changed its format to one that's more modern and less informative. . . .

. . .**The World of Fiction** by Bernard DeVoto, published by The Writer, Inc., Boston, 1950 (still in print), $5.95 299pp. . . .

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Dona Vaughn
Lake Jackson, Texas

COMMUNICATIONS

COMMUNICATIONS

ACCESS TO POETRY

by Anne Waldman

St. Marks Poetry Project
33 St. Marks Place
New York, NY 10003

Since "schools" of poetry really don't exist today, access to current poetry is through the individual poets themselves. Access for most part 4 ways: readings, records & tapes, books, magazines. *Hearing* a poet's works, in some ways the most rewarding, via live readings and this phenomena has mushroomed in the past 10 years. Nature of poetry is evanescent. The inspiration or food one receives is not a commodity so the poet at a basic level has to survive by means other than his soul's trade. Remember Lew Welch saying when he went off to disappear Why can't a poet be treated like a carpenter in this society? So this misfit quality of poetry makes it very precious, keeps it very pure, although a poet's life is often difficult. Thus we are lucky to witness poets read their own work or the work of the "muse" speaking through them, which brought alive has the added power of unmasking, elucidating mystifying, hypnotizing, prophecizing and we can also *hear* & feel the music inherent in the words. Poets are the shamans and shamanesses of the tribe who can purge their listeners, draw untapped areas to the surface, shape them into magical language and work spiritual energy transference to carry the whole room higher!

Hearing poets is possible in many colleges throughout the country (find out what poets are visiting nearest you) as well as certain special programs in cities. For nine years The Poetry Project at St. Mark's Church-In-The-Bowery in New York City's Lower East Side has been sponsoring weekly readings by the likes of Allen Ginsberg, Robert Bly, Ted Berrigan, Diane DiPrima, Anselm Hollo, Jerome Rothenberg, John Wickers, Joanne Kyger, Ed Sanders, Dick Gallup, John Ashbery, William Burroughs & Charley Plymell in addition to numerous younger, lesser-known poets with imagination and energy, as well as open readings, free experimental writing workshops run by poets, a lecture series with experts on Cybernetics, Anthropology, Dream Study, and also providing a publishing center for countless small magazines and pamphlets. The Project is under the direction of poet Anne Waldman but is run more or less cooperatively by all the poets who work there and live in the community. Minimal funding is provided through the New York State Council On The Arts and private foundations & individuals, but mostly it's the devotion of the artists which makes it tick. The Poetry Project publishes a monthly Newsletter edited by Bill MacKay which disseminates information about poetry events, new books & magazines and activities at The Project, and includes poems, and letters to the editor. Available for a season (Sept.– July) by sending $1 to The Poetry Project Newsletter, St. Mark's Church In-the-Bowery, NYC 10003. Publications emanating from The Project are THE WORLD (one of the oldest extant mimeo magazines now in its 29th issue which sells for $2 tho copies are scarce since less than 1,000 printed), ADVENTURES IN POETRY magazine and books edited by Larry Fagin and publishing among others Jack Spicer, Fielding Dawson, Frank O'Hara (catalog available upon request c/o The Project), WORKSHOP and UNNATURAL ACTS (Edited by Bernadette Mayer and Ed Friedman), TELEPHONE and ANGEL HAIR pamphlets. Scheduled readings are held on Wednesday nights at 8:30 (often big bashs with crowds of over 1,000 featuring 30 or more poets) and Monday nights at 8, and Open Readings are the first Monday of each month. Admission is by contribution, an anachronism in NYC where it costs $ to breathe. There's an interesting poetry series at San Francisco's Intersection, 756 Union Street, which has been blooming for 3 years and has featured Phil Whalen, Michael McClure, Lewis MacAdams, Tom Veitch, Kenneth Rexroth, Andrei Codrescu, Lewis Warsh, to name a few. . . By writing to the above address one can get on the mailing list.

Back in New York an organization called Poets & Writers at 201 West 54th Street publishes a DIRECTORY OF AMERICAN POETS including the names & addresses of over 1,300 poets and contemporary writers throughout the country. Costs $4, and also includes a listing of administrators and organizations that sponsor readings. Most helpful to poets, but maybe you'd just like to write a letter to Robert Lowell or Terry Southern.

Most exciting poetry records emanate from Giorno Poetry Systems Institute, Inc. John Giorno is the wizard-mastermind behind Dial-A-Poem which operated through the NY phone company 5 years ago but faced endless censorship & bigtime red-tape hassles. The first double-album "THE DIAL-A-POEM POETS" acetates the voices of Robert Creeley, Jim Carroll (young New York Street punk), John Sinclair (of White Panther Party & 2 joint bust fame in Ann Arbor), Joe Brainard, Taylor Mead, Lenore Kandel, David Henderson, William Burroughs, the ubiquitous Allen Ginsberg & a dozen more & sells for $5.98. Second album entitled "DIS-CONNECTED" has some of the same & more: Michael McClure, Ron Padgett, John Giorno, Diane DiPrima, Anne Waldman, Maureen Owen, Michael Brownstein. For $10.50 one can purchase the 4 record set. Write to Giorno Poetry Systems Institute, Inc., 222 Bowery, NYC 10012. The Institute exists to "investigate the place of contact between poet & audience" and to garner support for same. More discs by individual poets are in the offing.

Occasionally one comes across something worthwhile on the radio (WBAI in NYC and KPFA in Berkeley), but possibilities of poetry have yet to be explored via air waves.

Hip bookstores are the major source of poetry plenty, some specializing in "underground" items more than others. The Gotham Book Mart on NYC's 41 W 47th Street and Phoenix Bookshop run by Bob Wilson (famous for his rare & excellent Gertrude Stein collection) at 18 Cornelia Street are old

Gianfranco Mantegna

Anne Waldman introducing William Burroughs at St. Mark's Poetry Project.

standbys. Elias Wilentz's 8th St. Bookshop at 17 W. 8th St. is a Greenwich Village landmark and The East Side Bookshop at 30 St. Marks Place is very helpful. Out in Berkeley, Serendipity (1790 Shattuck Ave., Berkeley 94709) can get you almost anything you want. Catalogues for all the above available upon request. Of course there are numerous other bookstores across the country (Whole Cosmep Catalogue available from PO Box 1056, Paradise, California 95969 can provide lists) which have done great service to the little magazines & books community— Cleveland's Asphodel, Philadelphia's Middle Earth Books, Epstein's in Iowa City, Shakespeare & Co., in Madison, Wisconsin, Ferlinghetti's City Lights in S.F. to mention just a few. . . Distribution has improved with advent of Book People at 2970 Seventh St., Berkeley 94710. In Canada try BOOKMOBILE at 403 Huron St. (rear), Toronto M5S 2G5, same address for COACH HOUSE books which are quite engaging on the whole & handsomely produced. Whole Cosmep Catalogue, previously mentioned, also a fine directory for just about all the information around the small press scene.

Magazines worth checking out are Bill Berkson's BIG SKY coming out of Bolinas at Box 272, Bolinas, CA 94924, Pierre Joris' SIXPACK, the current issue spotlighting the much-loved and now deceased Paul Blackburn, (address: Box 158, Lake Toxaway, North Carolina 28747), Jerome Rothenberg's ALCHERINGA featuring ethnopoetics, Alice Notley's CHICAGO (834 Waveland Ave., Chicago, IL), "L" magazine (which features work of more "abstract" poets like Clark Coolidge) at 2021 Francisco, No. 301, Berkeley, CA 94701, Kathy Acker's strange Black Tarantula "newsletters" from 46 Belvedere, San Francisco 94117. And don't forget the sensational BEAN NEWS!— a hilarious & profound "news" sheet which resembles The Manchester Guardian and is masterminded by Ed Dorn of great GUN-SLINGER fame (address: 2741, Geary Blvd., San Francisco, 94118). There's so much going on in poetry publishing, it's impossible to sort out here but there are some very fine small and semi-commercial presses which consistently publish quality poets & fine books. Lita Hornick's KULCHUR FOUNDATION (261 Fifth Ave., NYC 10016) has published Joe Brainard, Rochelle Owens, John Perreault, Kenward Elmslie, Ron Padgett & Ted Berrigan in collaboration, Kenneth Koch, Carter Ratcliff & numerous others in large handsome collections with gorgeous covers by Ed Rusha, Alex Katz & others. Send for list. Corinth Books has long been pioneering in poetry— publishing early books by Allen Ginsberg, Le Roi Jones (Imamu Baraka), Lewis Warsh, Gary Snyder, Joel Oppenheimer, Barbara Guest, Peter Schjeldahl and many more. Something Else Press (West Glover, VT) has published Emmett Williams, Gertrude Stein, John Giorno to mention just a few. Black Sparrow, PO Box 25603, Los Angeles, CA 90025 has an exceptional series— gorgeous books by Michael McClure, Tom Clark, Diane Wakoski, Charles Bukowski, and hundreds more.

The Institute Of Further Studies, Box 482, Canton, NY 13617 has published wonderful books by Ed Sanders (check out EGYPTIAN HIEROGLYPHS), Lewis MacAdams and others.

Donald Allen's Grey Fox Press and Ferlinghetti's City Lights continue to flood the market with goodies.

There's a hot new Press on the boards publishing Edwin Denby, Frank O'Hara & Allen Ginsberg (Full Court Press, 249 Bleeker, NYC).

There is such a sheer variety of individual poets working in the U.S. today it's virtually impossible to keep track of them all. There are no schools as such with resident bards with the stature of Charles Olson, although Anselm Hollo, Ted Berrigan, Ed Dorn, Robert Creeley and Robert Kelly are out their in the academies making huge waves. However, most young & eager-for-a-hearing poets make their ways to S.F. and N.Y.C. to try out their work before astute audiences or submit their poetry voraciously to the little magazines who are responsive to what's NEW today and not subject, naturally, to the commercial imperative. But groups (defined by locale rather than necessary similarity in the work itself) keep in touch through interest in each other's work and there's a vast exchange going on at this very moment through the mails, through books & magazines, cassets, records and so on. The fact that there are no "Schools" is *more a reflection of the kaleidoscopic society we live in rather than any narrowness in quality of the work itself.*

Books by the following poets are consistently inspiring and provide much brainfood: Gary Snyder, Frank O'Hara, Allen Ginsberg, Michael McClure, Gregory Corso, William Burroughs, John Wieners, John Ashbery, Philip Whalen, Kenneth Koch, Lorenzo Thomas, James Schuyler, Kenward Elmslie, Jack Kerouac, novels of Harry Mathews, John Giorno, Ed Dorn, Joanne Kyger, David Henderson, Clark Coolidge, Ted Berrigan, Tom Clark, Diane DiPrima. All Jerry Rothenberg's anthologies: AMERICA: A PROPHEC SHAKIN THE PUMKIN, TECHNICIANS OF THE SACRED Andrei Codrescu, Ishmael Reed, Michael Brownstein (for strange Sufi-Borgesesque stories see BRAINSTORMS, pub. by Bobbs-Merill)

Specifically check out:

MOVING by Bernadette Mayer (Angel Hair Books, Box 257, Peter Stuyvesant Station, NYC 10009 $2) which goes beyond Stein.

NEIL YOUNG by Tom Clark (Coach House)

CITIES by Robert Kelly (Frontier Press)—— finely honed & exquisite prose-story.

WHERE I HANG MY HAT by Dick Gallup (Harper & Row)

I REMEMBER series by Joe Brainard (Angel Hair Books, see above)

SNORING IN NEW YORK by dance-critic Edwin Denby (Angel Hair Books)

THE POETRY ROOM (Lewis MacAdams) Harper & Row.

LIVING AT THE MOVIES by Jim Carroll (Grossman/Viking)

THE LUIS ARMED STORY by Tom Veitch (Full Court Press 249 Bleecker St. NYC 10014) and EAT THIS! (Angel Hair Books)

INCIDENTALS IN THE DAY WORLD by exciting young poet Alice Notley (Angel Hair Books) and PHOEBE LIGHT by same (BIG SKY BOOKS).

COUNTRY RUSH by Maureen Owen (Adventures in Poetry Books)

CLEOPATRA by Jennifer Bartlett (Adventures In Poetry Books)

Old standby anthologies include:

AN ANTHOLOGY OF NEW YORK POETS (Random House- Shapiro & Padgett, Eds.)

THE WORLD ANTHOLOGY & ANOTHER WORLD (Poems from the St. Mark's Poetry Project, Bobbs-Merill).

A CONTROVERSY OF POETS (Ed. Paris Leary & Robert Kelly)

CATERPILLAR ANTHOLOGY (Ed. by Clayton Eshleman)

THE YOUNG AMERICAN POETS (Ed. Paul Carroll - Follett)

FLOATING BEAR anthology (Ed. Diane Di Prima & Leroi Jones)

Don Allen's Grove Anthology & for poetics, try

THE POETICS OF THE NEW AMERICAN POETRY (Ed by Don Allen & Warren Tallman) All this just a sampling.

There's exhilerating poetry to feed us for years long after our other supplies diminish.

•

One significant contemporary American poet was left out of Anne Waldman's list. Anne Waldman.

–SB

THE POETRY PROJECT NEWSLETTER

No. 13 1 March 1974

Bill Mac Kay, editor
St. Mark's Church, 2nd Avenue
& Tenth St., New York 10003.

"Light clarity avocado salad in the morning". The Selected Poems of Frank O'Hara (Random House, $3.45) is a feast, disarmingly beautiful. Once again, the loving, invisible fingers of editor Donald Allen leaves their mark, but no stain.

A generous & varied collection, graced by a fine cover collage by Larry Rivers.

•

Just out, Jim Harrison's Letters to Yesenin (Sumac, $2.45) w overdue, but worth the wait. Letters, then postscript, then poems. It lingers.

•

At this very moment, Larry Fagin is in his wretched hovel typing frantically, spending the last vestige of his sanity as he attempts to meet a March 30 publication date for Adventures in Poetry No. 11. If Larry's typing is half as good as the poetry, the issue will be a classic. Featured are long works by Coolidge, Dawson, McClure, Padgett, Schuyler, Towle, Waldman, Wieners, and others. One dollar and fifty at the usual bookstores.

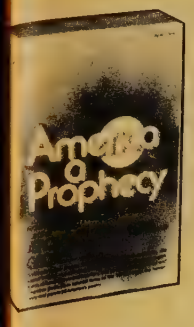
•

Poems letters stories articles by to about him: Charles Bukowski encompasses the latest issue of Second Coming. Other contributors include Harold Norse, Jack Micheline, Linda King, but clearly Buk, bearded, hair-slicked-down, beer bottle in hand, is the man they all came to wrestle. The whole carnival for two dollars, at bookstores or from P.O. Box 31246, San Francisco, CA 94131.

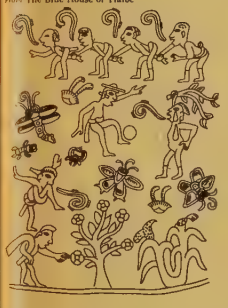
America: A Prophecy

In this fascinating new anthology Brother Rothenberg & Brother Quasha have recast modern american poetry, and its rich antecedants, along broad new lines. A new 'ethno-poetic' tradition that includes the early work of the dadaists & surrealists, the early 'field hollers' & gospel songs & the modern blues lyrics & great street talkin con man voice of Black America, the extraordinary Origin myths & brilliant 'magism' of Native American healing songs, & the scattered writings of early isolate white hobos & visionaries & assorted crackpots, as well as generous sampling of modern american poetry—— a poetry now well schooled in the revolutionary implications found in the early work of William Carlos Williams, HD and the venerable Ezra Pound. And through it all—— through the terrific urgency & excitement of the text, through the radical sometimes chaotic experimentation, through the waterfall of pure speech both 'shocking' & shocked'—— the presiding fact of Prophecy—— a foretelling of the return of the Old Gods. Released through the translations of these ancient & magical texts, The Old Gods, we are told, are again walking among us in the West.

—Robert Callahan



America: A Prophecy
George Quasha &
Jerome Rothenberg, Eds.
1973; 603pp.
$3.95 postpaid
from:
Vintage Books
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth



From The Blue House of Tlaloc

HARRY CROSBY
Photoheliograph [1929]

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This is the account of how all was in suspense, all calm, in silence; all motionless, still, and the expanse of the sky was empty.

This is the first account, the first narrative. There was neither man, nor animals, birds, fishes, crabs, trees, stones, caves, ravines, grasses, nor forests; there was only the sky.

The surface of the earth had not appeared. There was only the calm sea and the great expanse of the sky.

There was nothing brought together, nothing which could make a noise, nor anything which might move, or tremble, or could make noise in the sky.

There was nothing standing; only the calm water, the placid sea, alone and tranquil. Nothing existed.

There was only immobility and silence in the darkness, in the night. Only the Creator, the Maker, Tepeu, Gucumatz, the Forefathers, were in the water surrounded with light. They were hidden under the green and blue feathers, and were therefore called Quetzal Serpent. By nature they were great sages and great thinkers. In this manner the sky existed and also the Hart of Heaven, which is the name of God and thus He is called.

(From the Popul Vuh: Beginnings. Goetz & Morley Translation)

•

When they had won the war
And for the first time in history
Americans were the most important people —
When the leading citizens no longer lived in their shirt sleeves,
And their wives did not scratch in public;
Just when they'd stopped saying "Gosh!" —

When their daughters seemed as sensitive
As the tip of a fly rod
And their sons were as smooth as a V-8 engine —
Priests, examining the entrails of birds,
Found the heart misplaced, and seeds
As black as death, emitting a strange odor.

(The Innter Part. Louis Simpson)

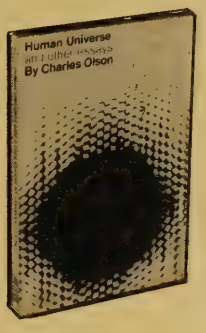
From the half
of the sky
That which lives there
is coming, and makes a noise.

*(Anonymous Chippewa Song.
Francis Densmore Translation)*

Human Universe, And Other Essays

"It is a human universe, and I is a correspondant" wrote the poet Ted Berrigan. This book by Charles Olson of Gloucester Massachusetts is the most clear and comprehensive statement I have ever read of the actual condition of man in the present time which is NOW. Olson's total concern is how to live, how to proceed. There are laws, Olson says, and they are discoverable. Olson's field is human space. "What I am kicking around is this notion," Olson writes, "that KNOWLEDGE either goes for the CENTER or it's inevitably a state whore." The center of politics is language, which is why we are not going to shout about Peter Pan Peanut Butter. We are making discriminations. We are using our heads. And hopefully we are not following a mystery for its own sake for it will surely take us out of the world. I have read this book about thirty times. Every time I read it I get, in different guises, the charge of energy that tells me I can do it; I can make the world comprehensible for myself and for the ones I love.

—Lewis MacAdams, Jr.



Human Universe
(And other essays)
Charles Olson
1951; 159pp.
$1.95 postpaid
from:
Grove Press, Inc.
53 E. 11th St.
New York, NY 10003
or Whole Earth

We have lived long in a generalizing time, at least since 450 B.C. And it has had its effects on the best of men, on the best of things. Logos, or discourse, for example, has, in that time, so worked its abstractions into our concept and use of language that language's other function, speech, seems so in need of restoration that several of us got back to hieroglyphs or to ideograms to right the balance. (The distinction here is between language as the act of the instant and language as the act of thought about the instant.)

But one can't any longer stop there, if one ever could. For the habits of thought are the habits of action, and here, too, particularism has to be fought for anew. In fact, by the very law of the identity of definition and discovery, who can extricate language from action? (Though it is one of the first false faces of the law which I shall want to try to strike away, it is quite understandable—— in the light of its identity—— that the Greeks went on to declare all speculation as enclosed in the "UNIVERSE of discourse." It is their word, and the refuge of all metaphysicians since—— as though language, too, was an absolute, instead of (as even man is) instrument, and not to be extended, however much the urge, to cover what each, man and language, is in the hands of: what we share, and which is enough, of power and of beauty, not to need an exaggeration of words, especially that spreading one, "universe." For discourse is hardly such, or at least only arbitrarily a universe. In any case, so extended (logos given so much more of its part than live speech), discourse has arrogated to itself a good deal of experience which needed to stay put—— needs now to be returned to the only two universes which count, the two phenomenal ones, the two a man has need to bear on because they bear so on him: that of himself, as organism, and that of his environment, the earth and planets.

•

I take it that CONTEST is what puts drama (what they call story, plot) into the thing, the writer's contesting with reality, to see it, to SEE;

that climax is not what happens to the characters or things (which is, even at its finest, no more than a rigged puppet demonstrandum) but is, instead, the issue of this contest, the ISSUE of the man who writes—— "a broken stump" said my peer, "This is what a plot ought to be."

Haiku

Japanese traditional form seeking maximum impact from minimum words in highly formal structure. Renowned translation and comment by R. H. Blyth in four lovely volumes. Indeed like cherry blossoms on a very old very tough branch.

—SB

Haiku
(Vol. I Eastern Culture, Vol. II, Spring, Vol. III, Summer-Autumn, Vol. IV, Autumn-Winter)
$7.95 each postpaid
from:
Kinokuniya Book Stores of America Ltd.
Japan Center
1581 Webster St.
San Francisco, CA 94115

A boat hidden in a creek, or ("a hilly island hidden") in a marsh,—— these are called safe. Even so, something strong may bear them away at midnight. Men in their delusion do not realize this. The hiding of small things in large ones is all right, but they may be lost. If on the other hand you hide the universe in the universe itself, there is no place where it can be lost. This is the Great-Nature of all things.

•

古池に草履沈みてみぞれかな　蕪村
Furuike ni zôri shizumite mizore kana

The old pond;
A straw sandal sunk to the bottom,
Sleet falling. Buson

•

とんぼとぶ　とんぼのうへも　とんぼとぶ空　保流
Tombo tobu tombo no ue mo tombo tobu sora.

Dragonflies fly,—
Above them too fly dragonflies,—
In the dragonfly sky. Horyu

This is not an imitation of sounds like Tennyson's, it is an endeavour to express the height of the sky through the repetition of the same sound. It corresponds to Bach's use of the step motif in suggesting destiny; here it represents infinity.

白魚やさながら動く水の色　来山
Shirauo ya sanagara ugoku mizu no iro

The whitebait,—
As though the colour of the water
Were moving. Raizan

•

秋の暮烏もなかで通りけり　几董
Aki no kure karasu mo nakade tôri keri

An autumn evening;
Without a cry,
A crow passes. Kishû

•

けろりくはんとして鳥と柳哉　一茶
Kerorikan to shite karasu to yanagi kana

As if nothing had happened,
The crow,
And the willow. Issa

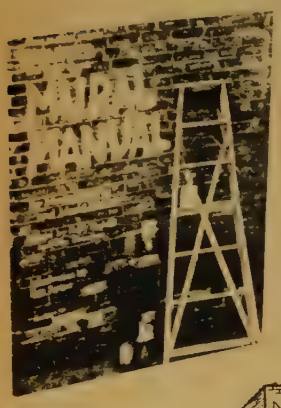
Kerorikan has the meaning of "nonchalant," "calm," and here refers to the smugness of the crow, its perkiness, but runs over onto the willow, which is also, in its own inimitable way, self-possessed. We have too the contrast of the graceful stillness of the willow, and the powerfully-controlled movement of the crow.

COMMUNICATIONS

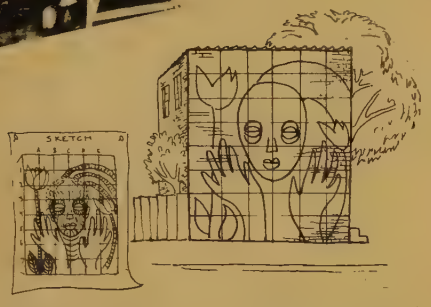
Mural Manual

You can tell a good city or a good neighborhood by two indicators: 1) lots of trees (see Pg. 484), 2) Local-talent murals on random walls, selling nothing but neighborliness. Here's all the lore you need to go to it.

–SB
[Suggested by R. Green]



Mural Manual
Mark Rogovin and Marie Burton
1973; 86pp.
$2.00 postpaid
from:
Public Art Workshop
5623 W. Madison St.
Chicago, IL 60644
or Whole Earth



Make the same grid on the wall. Use a snap line to make long straight lines on the wall.

Draw in on the large squares on the wall what appears on the small squares in your sketch.

Stand back often as you draw on the wall to make sure the drawing looks right from a distance.

BE FLEXIBLE. If you drawing on the wall follows the grid but doesn't look right from a distance, change it.

Watch out for irregular brickwork, holes in the wall, etc. Don't place an important detail in your design on or right next to an obstacle of this type, because it will distort or distract the eye away from the painted detail.

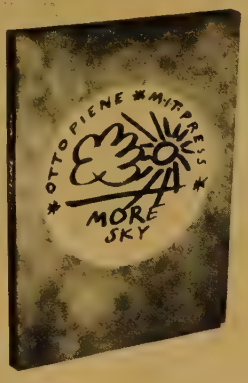
•

Silhouette mural. The silhouette mural is a quick and easy way to make a very exciting project. The description below can be adapted to every age group.

More Sky

The first uncramping essay-on-art I've seen that wasn't so mannered it merely moved the cramp to a different muscle.

–SB



More Sky
Otto Piene
1970, 1973; 237pp.
$9.95 postpaid
from:
The MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

Balloons

have an advantage over heavy bronze sculptures. Balloons are light, can be handled easily, and can fly. The disadvantages are also obvious: a balloon is breakable and short-lived. Its being short-lived gives it grace and makes it a means for direct communication as well as a symbol of the intensity of the moment. Balloon sculptures are portable, fly high, and fly far. The balloon as a marker is more feasible than any solid sign or mast. Messages can be attached to it easily. Balloons can make parks, buildings, cities, the sky festive. When they have done their service, they leave things the way they were– parks, buildings, cities, skies–– but they may have changed spirits.

•

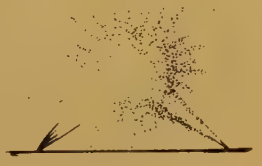
Biology

and the forces of growth enter the consciousness of artists. Flowers, flowerbeds, parks, land, sea, sky are ecological forms of organization on which urban bodies mainly have been parasites. After cities have eaten up land for so long, it is time for the green to eat its way into the cities. Lungs of green will help the cities breathe again. If more animals lived in cities, people could live there longer. The insights of microbiology may help in the creation of growing, edible sculptures.

•

Lightning

along with northern lights, mirages, tornadoes, and cloud formations, is among the large-scale spectaculars of nature that set standards of intensity for the artist's efforts. A lightning rod can be considered a most fascinating piece of conceptual art.



WATER BEAM AND
FIRE BEAM MERGING

Cream Rises

ART

The Natural Way To Draw *Best teaching book alive* 356
Art and Illusion *Best art analysis* 356
A History of Underground Comics *Cheap movies* 689
The Big Yellow Drawing Book *Start cartooning* 689
Catalog of Art Prints *Best overall source* 358
Understanding Media *Art as news* 308

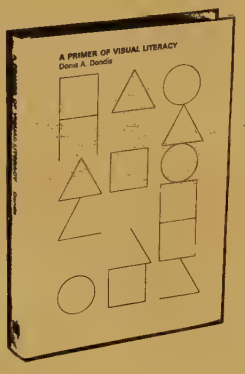
A Primer of Visual Literacy

Boy would I like to see a primer of visual literacy. This book is a nice try.

How about publisher Charles Abrams commissioning Minor White, E. H. Grombich, (whoever has the mapmaking sense) Erwin Raisz, Charles Eames, and mmm–– R. L. Gregory to do the job right?

Meanwhile the concept of visual literacy is worth feeding. Educators, stay out of this.

–SB



A Primer of Visual Literacy
Donis A. Dondis
1973; 194pp.
$9.95 postpaid
from:
The MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

Preference for Lower Left

In addition to being influenced by elemental relationships to the structural map, visual stress is maximized two other ways: the eye favors the left-hand and lower area of any visual field. Translated into a diagrammatic demonstration, this means that there is a primary scanning pattern of the field that responds to the vertical-horizontal referents (2.28) and a secondary scanning pattern that responds to the left-lower perceptual pull (2.29).

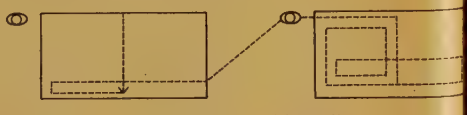
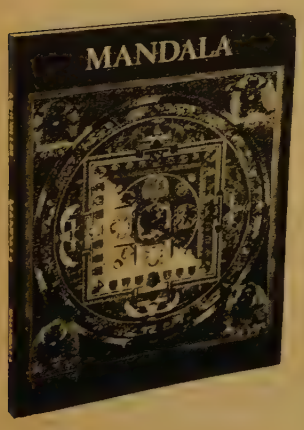


FIGURE 2.28 FIGURE 2.29



Mandala
José and Miriam Arguelles
1972; 136pp.
$5.95 postpaid
from:
Shambhala Pub., Inc.
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Mandala

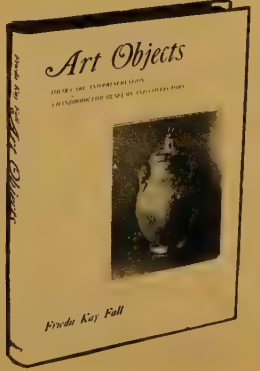
Round images are wholesome to look at and even more so to draw–– they are about consciousness, about balance, imprisonment and release. This collection is a nice assortment for priming your own image-making. I'd like to see another book with even more good pictures, less commentary, and more on sources.

–SB

Art Objects: Their Care and Preservation

An excellent technical book on how to keep Time away from your collection of whatevers.

–SB



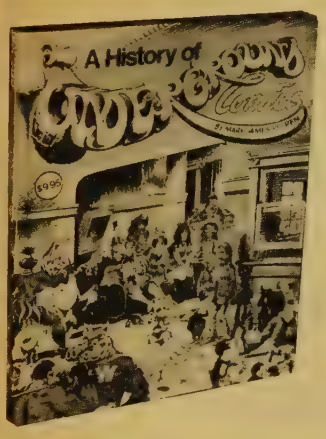
Art Objects
(Their Care and Preservation, A Handbook for Museums and Collectors)
Frieda Kay Fall
1971; 332pp.
$15.00 postpaid
from:
Laurence McGilvery
P.O. Box 852
La Jolla, CA 92037
or Whole Earth

A History of Underground Comics

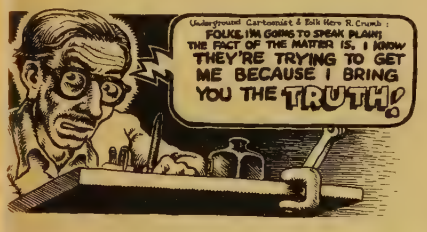
Suddenly in the American 60's pop music and comics swarmed ahead of movies as the cultural dominant forms. A handful of benevolent demon cartoonists did it all, and on the cheap. Minds changed. The male's male, Ken Kesey, was made an ardent women's liberationist by Lenore Goldfarb, Girl Commando, out of Robert Crumb. S. Clay Wilson showed me the leather sadist at the heart of Midwestern repressedness. The giddy hippie subculture got all its best self-criticism from its cartoonists.

And the full story's crowded into one visual orgy of a book. Nice work. (Also see Pg. 407 for original comix).

—SB



A History of
Underground Comics
Mark James Estren
1974; 320pp.
$9.95 postpaid
from:
Straight Arrow Books
Western Book Service
P.O. Box 3975
San Francisco, CA 94119
or Whole Earth



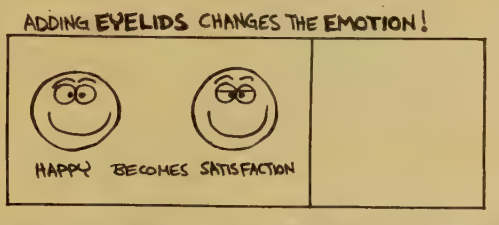
The Big Yellow Drawing Book

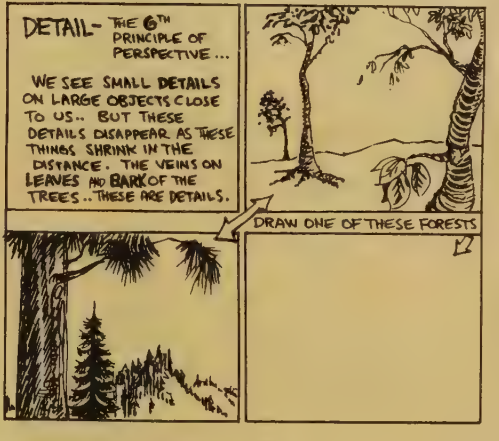
How to cartoon. Dan O'Neill's fiendish plot to free the world—— create millions of skilled cartoonists. (And put himself out of business. O'Neill is responsible for the daily strip "Odd Bodkins," "Air Pirates Funnies"—— sued by Walt Disney Productions—— and two books, **Hear the Sound of My Feet Walking Drown the Sound of My Voice Talking** *and* **The Collective Unconscious of Dan O'Neill.**) *This workbook was co-authored with Dan's father Hugh, an education professor. There's no better introduction to the deadly science.*

—SB

The Big Yellow
Drawing Book
Dan O'Neill, Marion
O'Neill, Hugh D. O'Neill, Jr.
1974; 64pp.

$2.50 postpaid
(schools may inquire for special discount)
from:
Hugh O'Neill and Associates
Nevada City, CA 95959



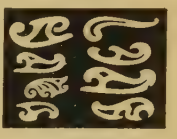


A. I. Friedman Art Supplies

I know of no mail-order source for art supplies that even compares. Prices are competitive, and response is fast. They carry some hard-to-find items like German drawing instruments and concentrated water colors and alkaline dyes.

—Steamboat

Catalog free
from:
A. I. Friedman Inc.
25 W. 45th St.
New York, NY 10036



"NT" Cutter Knife

An all-purpose knife with "chippable" blades — simply snip off blunt end of blade — a new sharp blade ready for use. *Two spare blades with each knife plus end-cap for chipping.*

NT-L (Large)	Each, $2.49
NT-S (Small)	1.50
Refill Pkg. (6) Blades	Large, 1.75
	Small, 1.50

Flexible Curve Rules

Lead core and outer casing of green square plastic; raised edge for inking. *Base slightly concave to provide firm grip.* Sliding lead core between steel ribbons to control curve when set.

No. 5300 (12-inch)	Each, $1.95
No. 5301 (15-inch)	2.50
No. 5302 (18-inch)	3.00
No. 5303 (24-inch)	3.50
No. 5304 (30-inch)	4.00

Brandt "Scaleograph"

An easy-to-use, time saving mechanical device that takes the guess-work out of scaling and cropping photographs, odd shapes, mortises, drawings, etc. Enlarges, reduces without computation. Scaled in picas and inches. Vinyl plastic, stainless steel and aluminum. Complete, $13.50

General Cartography

America's legendary master cartographer, Erwin Raisz, introduces the scientific art of mapmaking. Learn to map so that using your map is like having an idea.

—SB

General Cartography
Erwin Raisz
1938, 1948; 354pp.
$12.95 postpaid
from:

McGraw-Hill Book Co.
Princeton Rd.
Hightstown, NJ 08520
Manchester Rd.
Manchester, MO 63011
8171 Redwood Hwy
Novato, CA 94947
or Whole Earth

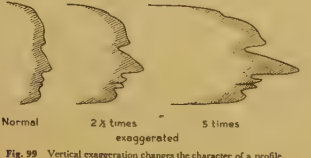
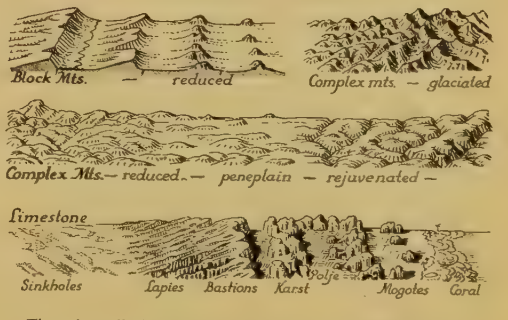


Fig. 99 Vertical exaggeration changes the character of a profile.

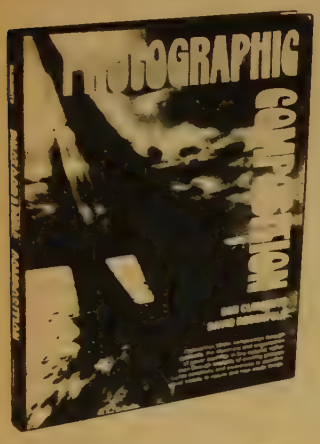


There is no limit to the demands upon a cartographer's knowledge. The author, in his practice, had to find out such diverse matters as the kind of sails the ships had in which Orellana descended the Amazon; the fact that the name Hamada el Hamra implies that its flat and rocky surface is red in color; and the elements and dimensions of an average airport.

Photographic Composition

I'm surprised. Some years ago I bought Edward Weston's formula, "Composition is the strongest way of seeing," and figured no further codification was useful. This book does go further, does spell out how you can see with strength and pass it on in your prints.

—SB



Photographic Composition
Ben Clements and David Rosenfeld
1974; 260pp.
$10.95 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ 07632
Box 18501
Salt Lake City, UT 84118
or Whole Earth

PLATE 8-5

Let us return to Plate 8-5, which failed pictorially because it lacked a center of interest.

From a greater distance, the building emerges in shape, detail, and light and dark to assert its importance. While the three foreground boats point toward it, the lines from each boat pick up the visual movement and conduct the viewer directly to its commanding position. With a definite principal feature and subordinate elements to support its dominance, the picture is worthy of capturing and holding attention.

Handbook for Contemporary Photography

Ultra-fine photographic technique— including the making of callotype prints. Photogravure, precise densitometry & parametric curves— and quick basics.

—SB

Handbook for Contemporary Photography
Arnold Gassan
1974; 147pp.
$5.95 postpaid
from:
Light Impressions
Box 3012
Rochester, NY 14614
or Whole Earth

For printing from small negatives it is desirable to have a negative which is "thin", i.e., has no more silver than is needed to print detail in the shadows. This is a 'minimum density' negative. It has small grain, and makes a crisp looking print. A minimum density negative can be exposed by pointing the meter at a dark shadowed area of the subject and then making the actual exposure two stops less than the indicated exposure. Remember, the meter is made to read the reflection of a grey card. Because the actual subject is darker, the photographer must correct the indicated exposure and *place* the exposure in the correct tone for correct negative density.

In practice, the darkest area of the subject which must have detail in the print is metered. Since this area (because of the wide angle of the meter's view) will include darker tones, it will correspond to an exposure two *f*-stops less than what would be indicated by a grey card measured in the same light.

The Zone VI Workshop

From the introduction— "I am convinced that the majority of people who photograph never reach the level of artistic expression of which they are capable. . . I teach technique. Each student has his own creative potential. . . When technique is mastered and controlled it enhances the creative process."

This book has much to offer any photographer who is past the beginning stage and is familiar with the terminology. Each step of the basic Black & White process from exposure to print-mounting is described in detail by a perfectionist and excellent test procedures are given.

The Zone VI Workshop *has some choice bits of info. Example: Ever heard of a 'cold-light head'? (Ever experienced one?) It's a special enlarging lamp that's said to give dramatically better results than condenser heads (with good negatives).*

I feel there's too much emphasis on equipment— mostly expensive and/or electric; there's even a catalog in the back. The writer often assumes that his materials and methods are 'only' and 'best'. But nevertheless, I rate this book highly for B&W technique because of its clarity, organization and excellent test procedures.

—J. Gaylord

The Zone VI Workshop
Fred Picker
1972; 123pp.
$5.95 postpaid
from:
Zone VI Studios
Putney, VT 05346

Viewing Filter for

35 mm, 5x7	*VF-35*
120 mm	*VF-2x2*
4 x 5 (etc)	*VF-45*

When I first attended the Yosemite Workshop, Ansel Adams distributed to each student a small brownish "gel"— like cellophane-filter. Looking through the filter was quite a revelation. It modified all of the colors, shadows and highlights in a scene to values very close to the values they would assume in a black and white photograph. It graphically showed shadows and colors as compositional forms.

It is very difficult to judge whether a merger of horizon, flesh tone, structure, etc. will occur against the sky or other backgrounds. A glance through the filter gives information on what, if any, filtration is needed to avoid mergers. Green and blue are especially difficult to judge. The eye is extremely sensitive to green, but the film has less sensitivity to green than to any other color. Film has oversensitivity to blue and often skies print much lighter than they appear. Red prints lighter than it appears. This filter tells you in advance what to expect and even how to change it. (See illustration). If the sky looks too light through the viewing filter, use a green, yellow or orange filter over the lens to darken it. That filter will also lighten the green trees.

Church of Hangaroa, Easter Island: News photographers say the secret of good photographs is "F/8, and be there." This church is the center of island life and after three weeks I had been able to get nothing better than a "record" photograph. "Being there" finally occurred minutes before a violent rain squall and the photograph was made as the small black cloud passed behind the figure. The white church was placed on Zone VIII and a K-1 (light yellow) filter was used. 1/25 sec., f/22, tri X sheet film.

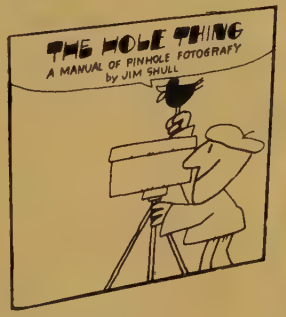
Cream Rises
PHOTOGRAPHY

Zone System Manual *Basic mastery* **352**
Total Picture Control *Camera capabilities* **352**
Zone VI Manual *Fine technique & equipment* **690**

The Hole Thing

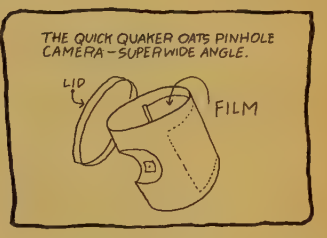
Photography minus equipment. Looks like fun.

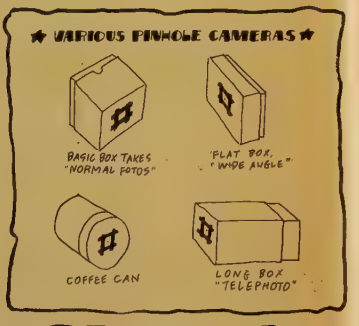
—SB

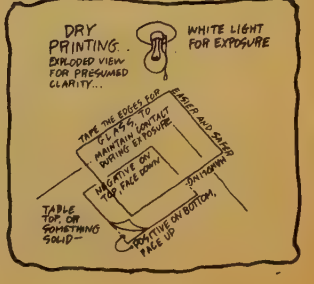


The Hole Thing
Jim Shull
1974; 64pp
$2.95 postpaid
from:
Morgan & Morgan, Inc.
145 Palisade St.
Dobbs Ferry, NY 10522
or Whole Earth

One readily apparent possibility is the wide-angle effect. For a "normal" photo you should have about a 6" focal length which amounts to about a 40°-50° angle view. If you have a 4" focal length you will get a wide-angle effect of about a 60° angle of view. And if you have a 3" focal length you get an 80° angle. This means that a type of photo that is considered to be real keen these days is a very simple thing. Even greater wide-angle effects can be obtained by curving the film so that more angle of vision is brought into the act. This also more or less equalizes the exposure over the film area. Such a camera can be made from a Quaker Oats box. For 8" x 10" format, use an ice cream box.







Balinese Character

Pioneer work still unsurpassed in using the camera as a cultural diagnostic tool. Sequences are particularly revealing, each one like a Muybridge-series of behavior and interaction rather than just physical motion.

–SB

Balinese Character
Gregory Bateson and Margaret Mead
1942; 277pp.
$15.75 postpaid
from:
New York Academy of Sciences
2 East 63rd St.
New York, NY 10021

The men return, still in a somnambulistic state, and after a few simple ballet maneuvers, they strut about singly. Suddenly, first one and then another gives a loud yell and turns upon his own chest the kris with which he attacked the Witch. This in-turned aggression is accompanied by a roaring noise and posturing in which the body is suddenly and repeatedly bent backward with a rising movement of the arms. In this action, the accent is on the upward motion of the arms and on the forward thrust of the pubis. After a few seconds of this activity, the man will start strutting again, tense and silent, only to revert, with another loud yell, to his spasmodic posturing. Some men actually fall backward onto the ground with an extreme backward bending of the trunk, and lie on the ground writhing in some sort of orgasmic climax.

Photography: Source & Resource

Interesting premise, that the root of good photography is not the equipment but the people and occasions of your learning how to see and share the sight/insight. So here's a fine book of access to photographic people, occasions, ideas, heuristics. The only thing I miss (and I missed in my own photographic training) is sufficient advice on how to SELL creative photography. (There is a listing of galleries). Art connects, or it is nothing.

–SB

Photography: Source & Resource
Steven Lewis, James McQuaid, & David Tait
1973; 214pp.
$6.00 postpaid
from:
Light Impressions
Box 3012
Rochester, NY 14614
or Whole Earth

The hardware/software distinction is one we use throughout this book.

This book is about 'software'. By 'software' we mean all the nontechnical aspects of creative photography; the programs for finding, learning, knowing, and thinking. The concrete places where these go on are schools, workshops, museums, galleries, books and magazines, and the inside of your head.

•

". . .the camera seems to be, next to unassisted and weaponless consciousness, the central instrument of our time. . ."

–James Agee (1939)
Let Us Now Praise Famous Men

•

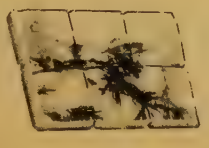
Hotchkiss Workshop in Creative Photography
c/o Minor White
203 Park Ave.
Arlington, MA 02174
Minor White's once a year intensive workshop at the Hotchkiss School in Western Connecticut.

•

Rockland Print-E-Mulsion

Print photographs directly on brick, wood, aluminum, tile, eggs, leather, concrete, cloth. . . E-mulsion costs $23/quart.

–SB



Rockland Celloid Corp.
599 River Rd.
Piermont, NY 10968

Is Anyone Taking Any Notice?

The best war photographs ever.

–SB

Is Anyone Taking Any Notice?
Donald McCullin
1971, 1973; 176pp.
$14.95 postpaid

from:
The MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

Light Impressions

The best catalog of fine photography books. Catalog free. 8-week update-service costs $5 for lifetime.

–SB

Light Impressions
Box 3012
Rochester, NY 14614

Negative Preserver

Somebody's probably told you about keeping 35mm negs in a Patterson negative file. This is not good for negatives since the glassine paper which they use to construct the file contains sulfur and other chemicals which will attack the silver image of one's negatives over time.

The best thing out is a PrintFile Negative Preserver (from PrintFile, Box 100, Schenectady, NY 12304), which is made of inert poly sheeting heat-sealed to keep the negatives protected in a smooth, largely inert environment. In addition, one can proof right through the file, since it is designed to hold strips of 5 frames (with the Patterson one must remove the negs to proof or recognize them). The damn files aren't cheap (20 cents per in the size which slips into a 3-ring binder), but they're a great convenience and help, and a darn sight better than anything else available. One can also write on the print files with Sanford's Sharpie marker (49 cents at any stationery store) to get an excellent permanent, nondangerous note next to the negative. If you do this in glassine paper one is risking quick destruction of the medium.

Yours,
Stephen S. Nagy
Philadelphia, PA

Wisconsin Death Trip

Diagnosing the past—— a Wisconsin town 1890-1910—— through one man's 30,000 photographs and concurrent newspaper reports. Conclusion: it was a stately madhouse. All photographs are x-rays; these are unusually well assembled.

–SB

Wisconsin Death Trip
Michael Lesy
1973; 250pp.
$5.95 postpaid
from:

Pantheon Books
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

•

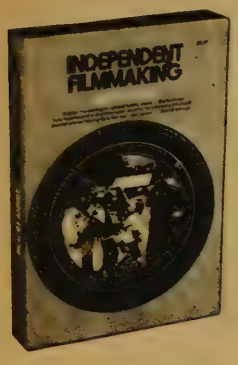
"Mary Karban, wife of Wenzel Karban, a farmer of the town of Neva, committed suicide by eating the heads of 4 boxes of matches. She was only 16 years of age and had been married last fall." [7/12, Town]

Independent Filmmaking

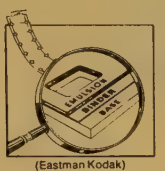
When I was really green at filmmaking, I could handle everything but the labs. Someone was sure to ask me: "Do you want a B-wind reversal master or a color reversal internegative, and what about pre-fog, post-flash, and inked or latent edge-numbers—— 7389, 7387, or total reciprocity failure?"

Well, no book's going to give you the wisdom and confidence you'll get from completing some films. But reading Lenny Lipton's book is as comforting as having a good friend who's an auto mechanic. Lipton takes the arcane practice of filmmaking and makes it much less mysterious. He's got a warm style and solid information. You've just got to trust a filmmaker who majored in physics and wrote "Puff the Magic Dragon." He's also made about 20 films.

—Tom Schneider

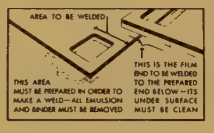


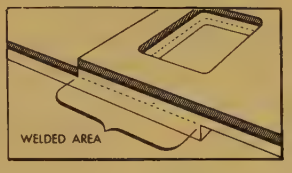
Independent Filmmaking
Lenny Lipton
1972; 431pp.
$5.95 postpaid
from:
Straight Arrow
c/o Western Book Service
P.O. Box 3975
Rincon Annex
San Francisco, CA 94119
or Whole Earth



(Eastman Kodak)

A Splice Is a Weld. At left, a magnified drawing of a section of film shows its principal layers (the visibility of the binder is greatly exaggerated). Before splicing, lower left, the emulsion (and binder) should be scraped off. The base side of the upper piece of film can be scraped or wiped with cement to clean it. A good splice is actually a weld, lower right: one side of the base is dissolved into the base of the other film.





It has been my experience, from earning a living often as a commercial filmmaker, that the success of even a professional *is* absolutely dependent upon his sense of himself as instrinsically independent: commerce, for him, is a means to an end; and, while its limitations may trap him creatively in the end, the meantime of his rise to commercial recognition is, almost always, conditioned by his independence of attitude within a job limitation. Gertrude Stein wrote that there are only two kinds of people: 'independent dependents' and 'dependent independents.' I think this book is written for both of these possibilities. I stress this point, as introduction, because I think Mr. Lipton takes his ability, naturally, for granted: whereas 'the reader,' whoever he may be, will find this the *most* crucial question when imagining himself as filmmaker. I wish to encourage him to take full advantage of this happily open and unprejudiced text to focus his sense of himself in preparation for any making he may consider.

—Stan Brakhage

•

Getting Credit

Some labs require you to pay for your work as you pick it up at the front desk; others may extend credit and bill you monthly. Whether or not you can get credit depends solely upon whether or not you already have credit. If you don't have credit, you usually can't get credit.

Here's one way to establish credit: save some money and start a savings account. Now take out a loan for about the same amount, using your passbook for collateral. Pay it back as specified, never missing or making a late payment. This is easy since you've already saved the money. When you've finished paying off the 'loan,' you have credit. Credit is a good thing to have for several reasons: if you have already paid cash for work the lab has performed, you are at a psychological disadvantage if you attempt to have them make good an error. Paying one bill a month instead of several can help you keep your records straight; and there are those lean months when the bill is heavy: then you can make a partial payment, deferring the rest, although you may have some interest added to your bill.

Wind noises can be attenuated by rolling off the low requency response below 100 Hz, 3 dB, 6 dB or even more. Rolling off the lows won't change the properties of recorded voice and will help to reduce the rumbling sound the wind makes.

The human voice can be given added emphasis, or *presence*, as sound engineers call this, to make it sound closer or more live, or present. What's usually needed is a 3 to 6 dB boost in the mid-range or 3000 Hz region. Sibilance, which is often the result of using a cardioid microphone too close to the speaker, can be helped by rolling off the highs, or sounds from about 5000 to 10,000 Hz, although it's questionable that any manipulation of frequencies in the 10,000 Hz region will have any effect on the final optical track—— which presently barely responds to 7000 Hz.

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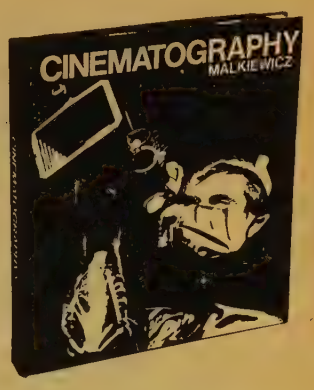
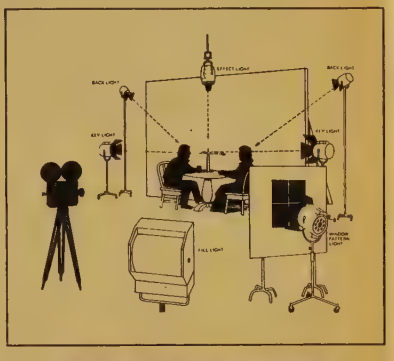
Cinematography

A glossy introductory technical manual mainly for studio work. I like its clarity.

—SB



Cinematography
J. Kris Malkiewicz and Robert E. Rogers
1973; 216pp.
$6.95 postpaid
from:
Van Nostrand Reinhold Co.
Order Dept.
300 Pike St.
Cincinnati, OH 45202
or Whole Earth

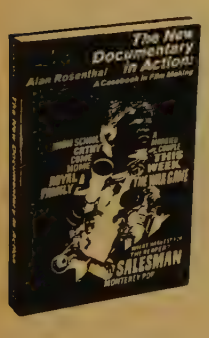


The New Documentary in Action

It seems to me that good documentary really pushes the limits of a director's (and editor's) talents. There's no famous novel to fall back on, no machismo from established stars, no high gloss costumes or sets to steal attention from the content. Small wonder that many fail. This book is about some documentaries that were successful (though not financially). It's also about the kind of combative people who thrive on the inconsistencies of reality and who are able to seize the opportunities to make art out of things as they are.

If you're not an avid TV viewer, you may have never seen most of the films examined here. But this doesn't diminish—— it increases the book's value. Documentaries in all kinds of strange forms are currently renascent. But they're as difficult as ever to see. The book gives access to this vital field of filmmaking through interviews with directors, and, in some cases, the editors and camera persons involved. It's fascinating reading, even if you haven't seen the film.

—Tom Schneider



The New Documentary in Action:
A Casebook in Film Making
Alan Rosenthal
1971; 287pp.
$2.95 postpaid
from:
University of California Press
2223 Fulton St.
Berkeley, CA 94720
or Whole Earth

Fundamental working relationships have also been modified, particularly in regard to the director's dependency on his cameraman and editor. As Allan King points out in the discussion of **A Married Couple**, when the director has to rely on the undirected spontaneous work of the cameraman, there has to be an extremely sophisticated understanding between the two or the film concept can be ruined.

The editing room, too has assumed a position of uniformly greater importance and has become the place where, more often than not, the film is really composed and structured. This is not to disparage or dispute the place of creative editing in the films of, say, Lorentz or Jennings, or to forget the brilliant rhythmic sequences of **Night Mail**. It is merely to be aware of the strikingly different problems in working from fully scripted, controlled footage and in trying to create order out of material caught on the fly. This means in practice that the editor's task has increased both in difficulty and creative potential, and that the conscientious director has to direct the editing even more closely than he did in the past.

•

The first thing a producer learns is that he will get more sympathy and action for his ten-minute film about the condition of one blind child than for his masterpiece on racism in the South that took a year out of his life to make.

•

A. The opening scene was one of the most ambitious kind of scenes I have ever attempted to film in my life. We had five camera crews, and had placed Charles Kuralt, the commentater, in a helicopter. The idea was that the film would open with Kuralt flying over *Webster Groves* in the helicopter and saying, "It has so many people, it has so many churches, it has no bars." He would then fly over the high school and he would land in front of the high school. At the very moment of his landing, the doors of the high school would burst open, and 3,000 screaming, shrieking students would run across the field, and surround him, and in the midst of all their confusion he would start asking them questions like, "How old are you? What kind of community is this? What do you like here? Do you date?" We did this with five crews, including one in the helicopter and one on the roof of the school, and got the clouds of dirt from the helicopter, the wind, the noise, the confusion, and the kids running madly from the school. It was an incredible gas of a scene. We cut it to a rock and roll score, and it was wild! It's one of the most exciting openings of a film I have ever seen. Then the vice-president in charge of documentaries sat down, looked at that scene, and said, "I never want to see that again. Out! That will not be in this picture."

Break Out!

Good collection of recent strange probings by hungry theater groups—— San Francisco Mime Troupe to Grotowski. These things have been tried, and some worked. What are you gonna try?

—SB

Break Out!
James Schevill
1973; 413pp.
$4.95 postpaid
from:
Swallow Press, Inc.
1139 S. Wabash Ave.
Chicago, IL 60605
or Whole Earth

"The Pointer," The Bread and Puppet Theatre at the 24th of May Parade in Washington, D.C. 1971. "The Pointer is a remarkable Schumann figure who poses in front of monuments, statues, banks—— wherever he pleases —— and points an enormous, questioning finger and thumb at these public places in a way that makes you reconsider their functions."

The Filmgoer's Companion

Any movie-user will find this guide indespensible. Splendid succinct reviews—— summaries of every noticeable movie, film-title biographies of sundry stars, directors, etc—— each with thumbnail sketch. Fine piece of work at bargain price. Might get used more than any other reference book in your house.

—SB

The Filmgoer's Companion
Leslie Halliwell
1965; 1070pp.
$3.95 postpaid
from:
Equinox Books
Avon Books
250 West 55th St.
Order Dept.
8th Floor
New York, NY 10019
or Whole Earth

ANCHORS AWEIGH (US 1945). Musical with Gene Kelly and Frank Sinatra as sailors on leave. Remarkable only as a forerunner of *On the Town* and for Kelly's delightful dance with a cartoon mouse.

•

LES ENFANTS DU PARADIS (France 1944). A superbly evocative and pictorial romance of Paris's 'theatre street' in the 1830's. Jacques Prevert's script mingles fact and fiction, farce and tragedy; Marcel Carne directs with superb control of the rich detail. The fine cast includes Arletty, Jean-Louis Barrault, Pierre Brasseur and Marcel Herrand. Photography by Roger Hubert and Marc Fossard, music by Joseph Kosma and Maurice Thiriet.

•

HAYDEN, STERLING (1916-). Tall American leading man also globetrotter and explorer. *Virginia* (debut) (41), *Bahama Passage* (41), *Blaze of Noon* (47), *The Asphalt Jungle* (50), *Flaming Feather* (51), *So Big* (52), *The Star* (52), *Prince Valiant* (54), *Johnny Guitar* (54), *Suddenly* (54), *The Eternal Sea* (55), *The Last Command* (55), *The Killing* (56), *Terror in a Texas Town* (58), *Dr. Strangelove* (63), *Hard Contract* (69), etc.

Improvisation for the Theater

Widely considered the best source for getting non-rote life seething on the stage. Take the chances, interact, make it through the lameness into originality that is.

—SB
[Suggested by Scott Beach]

Improvisation for the Theater
Viola Spolin
1963, 1973; 397pp.
$7.50 postpaid
from:
Northwestern Univ. Press
1735 Benson
Evanston, IL 60201
or Whole Earth

HIDDEN CONFLICT

Two or more players.

Where, Who, and What agreed upon. Each player takes a conflict and states it to himself in the first person without letting the other know what it is.

POINT OF CONCENTRATION: never to verbalize the problem (conflict).

EXAMPLE: Where—— kitchen. Who—— husband and wife. What—— breakfast.
Hidden conflict: Husband—— I am not going to work. Wife—— I want him to leave. I'm expecting a visitor.

POINTS OF OBSERVATION

1. Let audience know each player's hidden conflict.
2. When the hidden conflict is stated, the scene is over.
3. Variation of this is to write a series of hidden conflicts on slips of paper and let actors pick after they have decided on Where, Who, and What.
4. HIDDEN CONFLICT forces use of objects and was one of the early exercises that started the semantic shift from "conflict" to "problem," thus opening up new doors of inquiry.

•

Cream Rises
FILM

Independent Filmmaking *Outstanding guide* 692
The New Documentary in Action *Special problem, special skills* 692
American Cinematographer *State-of-the-business* 350
American Cinematographer Manual *Kit-bag reference* 350
Expanded Cinema *Notions* 348
Making It Move *Animation intro* 724
The Focal Encyclopedia of Film & Television *The Reference* 693

Film Repair

Dear Miss Shugart:

It's very likely you have a motion picture film in your library that's scratched or dirty or torn or brittle or warped—— and maybe even all of these. So you're planning to throw it out and order a new print-at a cost up to $350. Maybe even more.

Don't throw the damaged print out. Send it to us. We'll save it.

We restore and rejuvenate damaged motion picture films. We have a unique process that does such an extraordinary job, the films we treat can go right back into service. Only rarely is it too late for us to save a film.

We've been restoring films for MGM, Warner Bros., Walt Disney, Columbia—— all the top studios—— for years. And for Screen Gems, NBC and CBS Television, plus other important television, educational and industrial film libraries.

Our rejuvenation processing charge for 16mm prints is only 4 cents per foot for black and white and 5 cents per foot for color—— only about 10% of what you'd have to pay for a replacement. You will, therefore, be able to free important budget dollars to buy new titles and equipment instead.

Cordially,
Marvin A. Bernard
Chairman, Chief Executive Officer

Filmlife, Inc.
141 Moonachie Rd.
Moonachie, NJ 07074

GOOD FILM CATALOGS

Buy or rent a 16mm film. Asterisks indicate that there are additional offices in other cities. Also see the list in Psycho Sources *(pg. 722).*

—SB

Pyramid Films
Box 1048
Santa Monica, CA
90406

*Contemporary Films/McGraw-Hill
1714 Stockton Street
San Francisco, CA
94133

*Audio Film Center (Pg. 351)
406 Clement
San Francisco, CA
94118

Time/Life Films
43 W. 16th Street
New York, NY
10011

*Films Incorporated
1144 Wilmette Ave.
Wilmette, IL
60091

Allures Jordan Belson — A Janus Film

A hypnotic, kinetic voyage into the reaches of outer space: in this film, the universe is not a static phenomenon but a process of becoming, of attaining new levels of existence and organization. In Belson's words, we see "A combination of molecular structures and astronomical events mixed with subconscious and subjective phenomena—— all happening simultaneously." "The elegance and grandeur of Jordan Belson's films, like **Allures**, demonstrate that one man can make Hollywood's vaunted special effects departments look archaic." Pauline Kael. Color 8 min. sale $110 rent $10

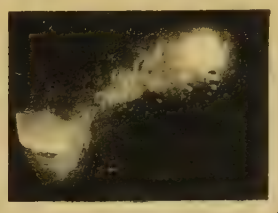
—Pyramid Catalog

Echoes

George Greenough is a surfer and filmmaker who has recorded the beauty and mystery of the ocean in spectacular fashion. Riding a highly maneuverable kneeboard (will turn so fast he can pull G's) with a specially designed wide angle lensed movie camera strapped to his shoulder, George gets inside the curl, then races for the daylight at the end of the tunnel with his high-speed camera picking up what the eye cannot see. Beach, trees, blue sky visible through the circle at the waves' end, surrounded by luminous water; then it closes down, like an F-stop, George hanging on until the wipe-out. Then darkness, turbulence, bubbles, until finally the camera surfaces, water streaming off the lens.

Recently George went to Australia and filmed underwater cross sections of waves breaking. There is also footage of dolphins swimming underwater and a stunning early morning ride on an 8' wall that seems to last forever, with sunrise streaming golden light through the wave. The screen becomes the eye's retina as 10,000 paintings appear in rapid succession. Best of all, it's merely what's there.

—Lloyd Kahn
[Suggested by Bob Easton]



The Coming of the Dawn — rent per showing: $15
Time: 10 minutes — print price: $150

Echoes Sound by Pink Floyd — rent per showing: $25
time: 24 minutes — print price: $300

from:
Rasheed Kahn
2020 Alemeda Padre Serra
Santa Barbara, CA 9310

Blackhawk Films

Funky family films in super-8 and 16mm. Silent and fierce. Fritz Lang, Mack Sennet, Tom Mix, Perils of Pauline. Dick Tracy. Purchase only.

—SB

Bulletin Free
from:
Blackhawk Films
Davenport, IA 52808

The Focal Encyclopedia of Film and Television Techniques

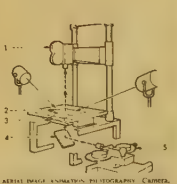
This book costs three cents a page; so if you can find it in a library you might do better just making copies of the pages of interest. Otherwise, here are some reasons for buying it:

A. The general editor is Raymond Spottiswoode who also wrote the classic but now outdated how-to: Film and Its Techniques. *After many years at the Canadian Film Board, he knows.*

B. This volume incorporates information from several volumes in the excellent Focal *series (each begins "The Technique of. . . ") which you might buy separately at more cost.*

C. If you have a grasp of one technology, say film, and want to cross over to video, or want to be conversant in both, this book will help.

—Tom Schneider



The Focal Encyclopedia of Film and Television Techniques
Raymond Spottiswoode
General editor
1969; 1100pp.
$37.50 postpaid
from:
Hastings House Publishers, Inc.
10 East 40th St.
New York, NY 10016
or Whole Earth

VIDEO

by TVTV

Video pages

TVTV is a video production group in San Francisco. Members of TVTV who compiled this information include: Michael Couzens, Hudson Marquez, Allen Rucker, Michael Shamberg, Tom Weinberg, and Megan Williams.

INTRODUCTION

When Sony introduced portable video equipment, everyone thought that the media revolution had come. There was a lot of heady talk about public access TV, porta-paks to the people, videotape as a major art form. The potential was so obvious that people made the particular American mistake of thinking that change was imminent.

Now, five years later, cable TV is gasping for life, public access is still cottage television, and video art is yet to produce major work. On the other hand, there are now thousands and thousands of porta-paks in people's hands.

This means that alternate television, or whatever you want to call it, is really just now beginning. Those who were attracted to it as a fad have fallen by the wayside, and those who stuck it out have just begun to get professional, not professional in the sense of becoming a junior CBS, but in developing whole new standards for TV.

As a result, if you didn't get sucked into believing that porta-paks could cure cancer, then there really is a lot going on, mainly in these areas:

1. Video service: this is the use of tape in situations where finished programs is not the only end. It includes therapeutic uses, community feedback, and small-scale information programs.

2. Video art: when this began, consensus was video synthesizers were going to be a major art form. Now so much synthesized tape looks the same that it's been dubbed "electronic wallpaper." While there are some brilliant people doing video synthesis, far more interesting is perceptual video, which rejuggles the familiar in both videotapes and video environments.

3. Non-fiction television: conventional TV journalism is still bound up in methods which come from other media, i.e., radio and documentary film. But videotape is inherently TV information, than for no other reason that it's played back through a TV set. The last few years has seen the rise of a new video journalism which is more personal and subjective than conventional forms, but no less true.

So the conclusion is that alternate TV is just now beginning to get good, after going through a testing period, and we'll know how it all turned out about five years from now.

—MS

BEGINNERS MANUALS

There is as yet no definitive guide to video-making. The following books will provide you with more than enough information to buy equipment and understand its technical possibilities. Don't look to them for a grammar of aesthetics.

Petersen's Guide to Video Tape Recording
Charles Bensinger & the Editors of Photographic Magazine
$2.00 postpaid
from:
Petersen Publishing Co.
8490 Sunset Blvd.
Los Angeles, CA 90069
or Whole Earth

Petersen's Guide to Video Tape Recording is a snappy, clear-cut, magazine-style introduction to basic equipment and procedures. For the price ($2.00), it's a well-illustrated point of departure.

•

Independent Video
(A Complete Guide to the Physics, Operation, and Application of the New Television for the Student, Artist, and for Community TV)
Ken Marsh
$7.95 postpaid
Available Nov. 74
from:
Straight Arrow
c/o Western Book Service
P.O. Box 3975, Rincon Annex
San Francisco, CA 94119
or Whole Earth

Independent Video reads like an elementary physics text for low-cost television. A useful, well-organized reference manual for comprehending the jargon and logic of engineers. Sketchy in its production and home repair advice.

•

The Video Primer
(Equipment, Production and Concepts)
Richard Robinson
$7.95 postpaid
from:
Links Books
33 West 60th St.
New York, NY 10023
or Whole Earth

The Video Primer is more of a production handbook, with an abundance of information on how to make your tapes professional-looking. Needlessly verbose, but enough options here on camerawork, use of accessories, and post-production to guide you toward your own production style.

•

To keep rechargeable batteries up to full charge, recharge them for a couple of hours every day. Never store batteries in a discharge condition. Batteries tend to have a "memory" and if they're left uncharged for long periods of time, they'll literally "forget" what their full charge potential was and won't ever take a full charge again. At the same time, once batteries are recharged, they should be allowed to sit for an hour or two before use.

—*The Video Primer*

•

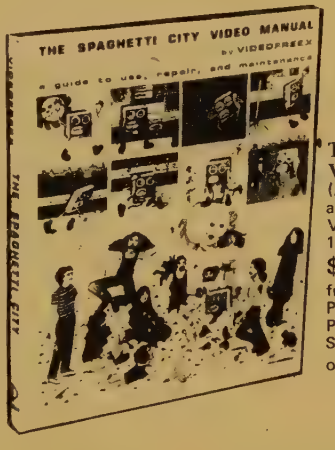
The Spaghetti City Video Manual

How to use video equipment is something you can always figure out for yourself, but how to repair it is essential from the start. Especially if you're on location somewhere, there's nothing worse than having to lug around a broken porta-pak with no idea of what's wrong with it.

The Spaghetti City Video Manual *is simply the most essential book on porta-paks there is. In simple language, it tells how the equipment works, and how to maintain and repair it. It concentrates on the things you can do yourself, and which go wrong the most, like broken cables, broken heads, and burnt vidicons, along with fundamental electronic adjustments.*

Its only drawback is that it's geared toward Sony equipment, while there are other good brands now available, but still, most of the information is applicable. Also, it could be cheaper, if the publisher brought out a paperback edition.

—*MS*



The Spaghetti City Video Manual
(A guide to use, repair, and maintenance)
Videofreex
1973; 116pp.
$7.95 postpaid
from:
Praeger Publishers, Inc.
P.O. Box 1323
Springfield, MA 01101
or Whole Earth

4. There is only one way to clean the brushes. . . VERY CAREFULLY! The brushes are thin, brittle pieces of metal, and they are already under pressure. They have enough flexibility to allow for a piece of chamois cloth or a Sony cleaning stick to be passed between them and the slip rings, but not much more.

HARDWARE

Since porta-paks were introduced six years ago, Sony has introduced four different models, or one every eighteen months. And whereas only Sony made them before, there are now at least a half-dozen competing brands. Fortunately, most of them share the same standard and new equipment tends to upgrade instead of replacing the old.

But anyone who is serious about video should make it a point to keep up with the state of the art, because there are occasional modifications—— like low-light vidicon tubes—— which extend the range of existing equipment, and frequent new products—— like color porta-paks—— which can alter things radically.

Next to talking to a good hardware dealer, the best source of equipment information is a periodical called **Video Tools**, published by CTL Electronics, a good hardware dealer. It is honest, comprehensive, and oriented as much toward the alternate as the industrial user.

Another company to keep in touch with is TECHNISPHERE in New York, which sends out brochures of equipment modifications, like adding video insert capability to your ½" editor.

—*Video Tape Recording*

As for the future, it's color. Color, however, is a whole different ballgame than black & white, as it's both more complex and more expensive. It's too soon to tell which system will be the best—— there are only a few available at present—— but the price range for a color porta-pak unit should be around $5-6,000.

And thanks to the most significant breakthrough in video technology since the porta-pak—— the TIME BASE CORRECTOR, a processor that makes cheap video broadcast-standard—— broadcasters can now use the same equipment as video freaks. So color will be the cross-over as commercial types downgrade and video freaks upgrade. This means that style, not technology, will be what separates commercial from alternate television.

—MS

VideoTools No. 1
$1.00 postpaid

Video Tools No. 2
Editors: Paula Jaffe and Bill Narum
1973; 41pp.
$3.00 postpaid

both from:
CTL Electronics Inc.
86 W. Broadway
New York, NY 10007

(New issue due Winter 1974)

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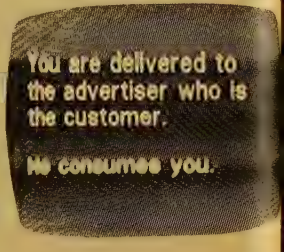
TECHNISPHERE CORPORATION
215 East 27th St.
New York, NY 10016

NEWSLETTER NOISE

Here's a handful of publications which cover a range of video television interests. They are the best in their category—— most with reliable bibliographies which lead to other special topic pubs. Or, for an industry overview, here's the creme de la creme.

Radical Software was the first of the video newsletters. A complete set of issues provides a theoretical and historical context for video. The information is available nowhere else and still invaluable. Bias is East Coast. Topics are networking, information theory, tv environment, video art, kids and video etc. The time span is '70-'74; as time went by, enthusiasm waned. There may be another volume or perhaps just a book, the editors are not yet certain.

Radical Software
Vol. I
(1-6)
$3 /issue
Vol. II
(1-6)
$1.95 /issue
from:
Gordon and Breach
One Park Ave.
New York, NY 10016



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Community Video Report (D.C.) and **Blue Sky** (the Rockies) are two excellent community/cable newsletters published by people who are doing it. The low-down on community organizing, successful program ideas, reports on cable conferences (straight and alternate), and analysis of the FCC from a user's standpoint. Well formatted samples of informative community newsletters.

Community Video Report
Quarterly
$4 / yr, personal
$12 /yr, industry
from:
Community Video Report
Box 21068
Washington, DC 20009

Blue Sky
Bi-monthly
$5 /yr, personal
$10 /yr, industry
FREE to Boulder residents
from:
Blue Sky
Box 1773
Boulder, CO 80302

Avalanche Newspaper (a spin-off of Avalanche Magazine) has recently premiered. This is *the* record of video art coming to you from New York City. The format is artists talking or writing about their own work. First issue features Joseph Beuys, William Wegman, Chris Burden, Willoughby Sharp, Vitto Acconci, ad infinitem, plus a list of available art tapes. Unsurpassed information for serious video artists and groupies.

Avalanche Newspaper
$8.50 /yr, 10 issues
75¢ single copy
from:
Avalanche Newspaper
93 Grand St.
New York, NY 10013

•

Filmmakers Newsletter (that's right f-i-l-m-makers) is the best film magazine around. In accordance with the surge of made-for-tv-movies and general video/film interfaces, it now carries solid video features. The information highlights technical breakthroughs such as ½" to quad and time-lapse recording. Regular articles supply excellent production information which hopefully will catalyze sorely needed high production values among video-t-a-p-e-makers.

Filmmakers Newsletter
$7 /yr, monthly
from:
Filmmakers Newsletter
Box 115
Ward Hill, MA 01830

•

We read three commercial tv publications religiously that keep us abreast of an industry which, if not the most respected in America, is one of the most powerful.

TV Guide is a laymen's introduction to the industry. The terse, well-researched features keep one entertained between commercials. Examination of network profits, the pay tv issue, how news merchants created happy-talk-news, what programs are coming up next season and who's starring.

TV Guide
$9.50 /yr, weekly
from:
Triangle Publications
Box 400
Radnor, PA 19088

•

Broadcasting is the industry's bible. There's a fuzzy area between industry pap and the truth. However, read with discernment, it provides in-depth coverage of commercial and cable regulatory issues not available elsewhere.

Broadcasting
$25 /yr, weekly
from:
Broadcasting Publications
1735 DeSales St. NW
Washington, DC 20036

•

Variety is the most cynical, ineptly laid-out, and clever newspaper of the communications field. A brazen publication with its own version of English (Ervin & Co. Soak the Soaps) and a non-stop outpouring of tv news, economics and gossip.

Variety
$30 /yr, weekly
from:
Variety
154 W. 46th St.
New York, NY 10036

•

Finally, there's a fellow in Philly who publishes Mass Media Booknotes (formerly Broadcasting Bibliophile Booknotes). I would like to see his office. MMB is a monthly, annotated bibliography of media books, journals, catalogs, magazines, encyclopedias, and newsletters. Somehow, he manages to fill ten offset pages a month. His reviews are incredibly succinct, accurate, and helpful. In lieu of more reviews here, MMB is highly recommended.

Mass Media Booknotes
$3.50 /yr, monthly
Back issues, index and special publications available.
from:
C.H. Sterling
Dept. of Radio-TV-Film
Temple University
Philadelphia, PA 19122

—MW

PUBLIC ACCESS & CABLE

Public Access is a way for community groups and individuals to get their stuff onto cable TV. It stems from a requirement that cable operators in the top 100 markets slot a channel for whatever odd characters come through the door, first come, first served. The FCC thinks of it as a five-year experiment whose fate is unclear after the rule expires in February, 1977.

One thing about Public Access is clear already. Its fortunes are necessarily linked with those of cable. If a large percentage of homes are on the cable, the potential audience for Public Access is big, too. If the cable operator is making lots of money, he will be cheerier and more cooperative when community groups come around for an outlet.

Unfortunately cable has not become either the communications revolution or the money-making machine that many people thought it would be a few years ago. Today the foundations and the promoters who created the fable have lost interest, and gone on to ballyhoo something else. We can't look to them for an explanation.

One excellent source that has cut through the cable is THE NETWORK PROJECT' They are a group of "power elite" fact-finders with a downbeat outlook on communications technology: the best thing to do with your TV set is tape a sign on it that says, "Go outside." They confront their subjects with no illusions, and all of the notebooks they publish are precise and thorough. If they seem negative, they also seem to be borne out by events. Their analysis of cable—— Notebook no. 5, CABLE TELEVISION, and Notebook no. 8, CABLE TV: END OF A DREAM—— like their other reports, are insightful deadpan primers on information properties in America.

The pioneers of Public Access are the Alternate Media Center of NYU's School of the Arts. For $35 they offer a publications program which is mandatory for groups in need of an access strategy. Current items in the series include: THE PUBLIC ACCESS EXPERIENCE: PROFILES OF SIX CENTERS, a catalog describing the on-the-air cable work of groups in AMC-related programs; and THE ACCESS WORKBOOK, a hefty two-volume manual for setting up a community program.

Volume 1 of the WORKBOOK covers cable hardware, cable rules, and strategies for access. The real meat is in their description of a core group for access, "the workshop." Volume 2 is a guide for using porta-paks for cable. The emphasis is on teaching as well as using, and while there is not enough here for a stone videofreak (see Beginners Manuals), there is plenty to get a community production group off the ground.

In addition to manual updates, AMC's $35 package includes surveys of library access and educational access, and a report on telemedicine. Also, they invite copying from any section of the package for free, provided it's not resold.

The Network Project
104 Earl Hall
Columbia University
New York, NY 10027
per notebook:
$3.00 (individual)
$5.00 (institutional)
Annual subscription (4-5 notebooks):
$10 (individual)
$25 (institutional)

Notebook Titles:

1. The Fourth Network, 2. Directory of the Networks, 3. Control of Information, 4. Office of Telecommunications Policy, 5. Cable Television, 6. Down Sesame Street, 7. The Case Against Satellites, 8. Cable Television: End of a Dream.

•

The Access Workbook, Vol. 1 & 2
Jacqueline Park, ed.
1974
$35.00 postpaid
for whole package including other items,
from:
Alternate Media Center
NYU School of the Arts
144 Bleecker St.
New York, NY 10012

FINDING TAPES

Adequate distribution is still a nascent process in video, despite all the talk about networks and tape exchanges. There are a number of exchange directories that publish sporadically, include voluminous lists of groups and tapes, and encourage one-to-one exchanges and sales. The best of these is the **Video Exchange Directory** out of Canada, whose 74-75 catalog lists 459 names. You'll also find extensive lists in old **Radical Softwares.** Groups come and go so fast that such listings are often out of date.

For good show tapes, it's best to go directly to distributors. **Electronic Arts Intermix** is the newest and most ambitious of these serving small-format video artists/journalists. For video art, also look at a catalog called **Art & Cinema,** a slick (and expensive) glossy that includes summaries and reviews of each entry. Magazines and newsletters are again helpful here.

Video continues to be known by the groups and individuals who make it, and not by the hard programming they make. For specialized materials, go to the group, if you can locate them.

Electronic Arts Intermix
84 5th Avenue
New York, NY 10011
Catalog available Sept. 74

Art & Cinema
Visual Resources, Inc.
1 Lincoln Plaza
New York, NY 10023
$35/year, 3 issues

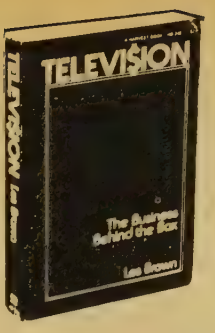
Video Exchange Directory
261 Powell St.
Vancouver, B.C. Canada
V6A 1G3
No price listed; donations accepted

—HM

TELEVI$ION

Television: The Business Behind the Box *is a chronicle of the 1970 network TV season, recorded by the dean of the TV industry data collectors. Then the TV editor of* **Variety**, *currently of the* **New York Times**, *Les Brown said recently that "the future of television is re-runs." Little enough changes in television that this entertaining window on 1970 is the best glimpse of the business circa '74, '75, '76,. . . .*

It was, in retrospect, naive of the networks to think the young would be happily hooked by the rock music and pop slogans of their promotions. And there was no better evidence that the network-studio-advertiser nexus was out of touch with



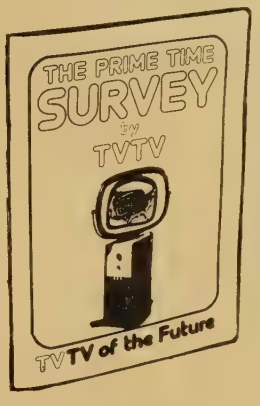
Television
(The Business Behind the Box)
Les Brown
1971; 374pp.
$2.85 postpaid
from:
Harvest Books
Harcourt Brace & Jovanovich, Inc.
757 Third Ave.
New York, NY 10017
or Whole Earth

the alienation phenomenon in America than their innocence in supposing they could sell their plastic replicas of reality to the turned-off or awakened young.

•

The Prime Time Survey

A TVTV report about: Non-Fiction Television; production notes on our last two broadcast programs, **The Lord of the Universe** *and* **Adland,** *or how to use ½" video for broadcast; new color porta-paks and hand-held color cameras; and TVTV projects for the future. 64 pages, lavishly illustrated.*



The Prime Time Survey
TVTV
1974; 65pp.
$5.00 postpaid
from:
TVTV
Box 630
San Francisco, CA 94101

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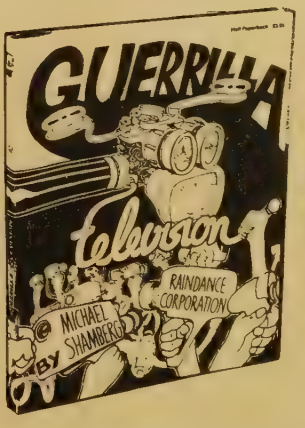
Guerrilla Television

The first video theory & practice manual, by Michael Shamberg and Raindance Corporation. Out of date in terms of hardware and groups, but still a useful conceptual tract. Fourth printing.

—AR



Guerrilla Television
Michael Shamberg & Raindance Corp.
1971; 108pp.
$3.95 postpaid
from:
Holt, Rinehart and Winston, Inc.
383 Madison Ave.
New York, NY 10017
or Whole Earth

Video Hardware Dealer

Leni is a gem, the non-businessperson's businessman. He loves to talk video and he offers real, live *deals* on equipment. He handles Panasonic and Sony, actually enjoys bartering over the final price, and really does operate as a technical resource-person after you own the equipment and can't figure out why the picture is coming out sideways. I've purchased hardware from him myself and been amazed by his interest. Show me a store where they would spend two hours telling you all the potential pit-falls of the hardware you're buying before they let you out the door with it.

Call Leni and see what the weather's like in L.A.:

Leni Goldberg
8535 Appian Way
Hollywood, CA 90046
(213) 654-1600

—Mark Hoy
Kensington, CA

Henscratches and Flyspecks

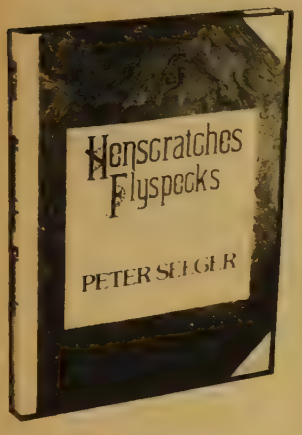
What a wonderful book! Pete Seeger has brought joy and pleasure to millions of folks with his singing. And now, he's whomped-up this easy guide to understanding the sign-language of music. Everybody who's itched to be able to look at those confusing spots, squiggles, swoops and lines and sing the song they stand for will have a ball.

—Scott Beach

This book got an ironclad copyright in the U.S. Library of Congress.

Anyone caught copying or repeating parts of this book and passing them on to others. . . will sure to be a good friend of mine, 'cause that's what I wrote it for in the first place.* (Don't let the publisher catch you).

*Thanks to Woodrow Wilson Guthrie for this thought.



Henscratches and Flyspecks
Peter Seeger
1973; 256pp.
$7.95 postpaid
from:
G.P. Putnam's Sons
200 Madison Ave.
New York, NY 10016
or Whole Earth

More on Music
See pp. 326-338.

Lou Harrison's Music Primer

This is one of the four or five books I've become most attached to in the last year. I've had my own copy (ripped off, flagrantly, from a friend in New York) for a little over a year now and feel that it's one of those books you can keep going back to and continue to find new little bits of joy and human wisdom in.

It's arranged in 'items', a chinese system adopted by Lou to circumvent the 'empirical pyramid' used in newspaper journalism which assumes one thing is more important than another. A meditation device?

Lou has studied and composed in many different musical traditions. One of his records, 'Pacifica Rondo', is literally written around the Pacific Ocean and the Cultures which border on it. The items dealing with music are reflective of these studies.

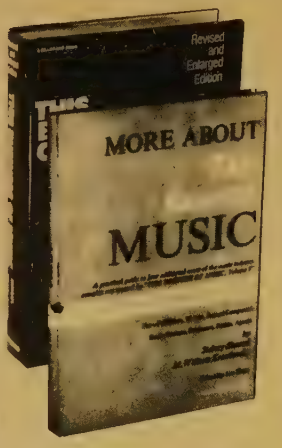
—Don Burns

Lou Harrison's Music Primer
Lou Harrison
1971; 50pp.
$4.25 postpaid
from:
C.F. Peters Corp.
373 Park Ave. South
New York, NY 10016

This Business of Music

A goldmine! This remarkably thorough guidebook, with its companion-piece, **More About This Business of Music,** *($6.95) brings together all the practical, legal, procedural and technical aspects of the music industry. The American Library Association calls it an Outstanding Reference Book. A must for songwriters, musicians, recordists, producers, publishers, everybody in the music business.*

—Scott Beach



This Business of Music
Sidney Shemel & M. William Krasilovsky
1971; 575pp.
$15.00 postpaid

More About This Business of Music
Sidney Shemel and M. William Krasilovsky
1967; 160pp.
$6.95 postpaid

both from:
Billboard Pub., Inc.
One Astor Plaza
New York, NY 10036
or Whole Earth

A common defense of a person who is charged with having infringed a copyrighted song is that the musical work is in the public domain. This can arise from abandonment of the copyright by the plaintiff by failure to use proper notices of copyright, failure to renew the copyright, or other action or inaction on the part of the plaintiff. Or the defendant may prove that the duplicated melody line or lyric originated from sources other than the plaintiff. In one case, the similarity of the Don Cornell hit recording "Play Me Hearts and Flowers" to another copyrighted song entitled "Hearts and Flowers" was exonerated by evidence that they both stemmed from Tobani's old-time favorite "Hearts and Flowers," which was available to the public since the copyright had expired.

Copyright is not jeopardized by acknowledgement that a public domain composition is the basis of the writer's song. In fact, the copyright registration Form E provides for the supplying of this information. However, in such a case, the copyright obtained is not on the public domain work but on the arrangement, revision, or other new material added. Thus, a user could, without infringement of "Till the End of Time," record the original Chopin "Polonaise" public domain version of the melody, but not the arrangement or adaptation contained in the song "Till the End of Time."

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The difficult, intermittent and seasonal employment situation of symphony orchestra musicians, the supply of which is generally larger than the demand for their services, has been recognized by the American Federation of Musicians in its agreement with phonograph record companies.

The following table compares the American Federation of Musicians standards for symphonic and popular music:

	Symphonic	Popular
Minimum Session	2 hrs	3 hrs
Permissible recording at session	40 minutes	15 minutes
Pay scale per session in 1966	$50.38	$61.00
Overtime pay per ½ hour	$12.60	$20.33

Sing Out!

This is **Sing Out!***'s 23rd year of publication. It is put out 6 times per annum by a group of dedicated folkies that includes Pete Seeger, John Cohen, Izzy Young and Barbara Dane. Each issue includes a dozen or more folk songs, old and new, with words, music and guitar chords. The songs are used to illustrate articles on what's new—— and what's old—— in folk music by* **Sing Out!***'s correspondents around the country and around the world. Every issue contains one or more "Teach-In" pieces, in which a noted teacher gives sheet music and chords for the style of an important player of traditional music—— everything from mouth bow to blues guitar to cajun fiddle to spoons. Once a year a whole issue is devoted to "Teach-Ins." There are interviews, columns, book and record reviews, news of coffeehouses and folk festivals, and a Folk Marketplace in which small independent companies hawk their musical wares. Usually there's a "soundsheet" bound into* **Sing Out!**—— *a paper-thin record on which the songs taught in the issue or described in articles can be heard.*

—Craig Karpel

One of the most exciting and interesting bottleneck tunes I have ever heard was Rev. Davis' "Whistlin' Blues." I have transcribed this in **The Book of Guitar Tunings** (Amsco Pub.). Even though Rev. Davis looked down on this style he had nevertheless perfected it and extended it to give a unique sound all his own. This was rather typical of Rev. Davis' approach to music.

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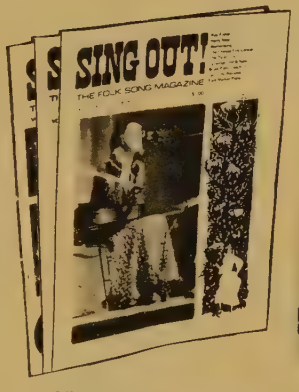


Sing Out!
Bob Norman, Ed.
$6.00 /yr
from:
Sing Out
Studio 20B
350 W. 57 St.
New York, NY 10019

What would you tell a guitar student about playing blues?

Well a lot of things I could tell a person if I just had the time to study what they were fishing for. To play blues on a guitar, I'd teach them to play the guitar like a piano.

What do you think of bottleneck playing?

I don't think nothing of that! You're cheating your own self. It ain't so respectable. People thinks its a pretty thing, but it's not.

Recorders!

hello, welcome back!

since the Last WEC my wife & i have gone into amateur music making in a big way. mostly old music (medieval, renaissance, baroque) and mostly recorders. this is so much fun and so easy to get into that i thought other people might like to hear sthg about it. we started out playing duets, found other people that played and did trios, and finally bought a bass and spread the gospel to friends who didn't play anything, and have played with as many as 9. . . usually quintets now tho. Lots of madrigals and renaissance dances for 5.

Anyway, here's some advice. The best source of recorder info is The American Recorder, $10/year, 4 issues, nearly worth it just for the ads, but the articles are interesting. Terrific music and record reviews, also books. Write American Recorder Society, 141 West 20th St., New York, NY 10011.

If you live really out in the sticks, and your local music store, if there is one, doesn't handle any recorder music, or if all they have is "turkey in the straw" for soprano and piano, then the best mail-order place is Magnamusic, in Sharon, Conn. 06069. They are somehow connected with The Recorder Center, Amenia, NY 12501, and they may send you both catalogs. You can sometimes get music cheaper by ordering directly from the publisher, (e.g. C.F. Peters, 373 Park Ave. South, New York, NY. 10016, ask for Recorder and Guitar catalog), but no other place will send you a price list that is so complete.

If you want to *buy* a recorder. . . it is easy to make a decision which you will regret. It is safest to begin with plastic, from Dolmetsch, Aulos, or perhaps Yamaha. If you want a wooden recorder that is as good as these, you have to start thinking about spending $50. The best discussion of brands I have seen is available as a reprint from Terminal Music, 166 West 48th St., New York, NY 10036, while the supply lasts. Two ads, 4pp each, "the inside story on Soprano Recorders," and ditto Alto Recorders.

Recorder and early instrument prices have gone nuts since the devaluation of the dollar. Lots are german, and they have their own inflation. . . I have seen small racketts go from $200 to over $400 in a few months. Recorders costing $80-90 now cost $50 a year or two ago, and they're headed straight up. A good American wooden recorder, not discussed by Terminal (which is run by Arthur Nitka, who wrote the OAK instruction book in last WEC), is the Koch Recorder, write to Haverhill, NH 03765. Very sweet, but maybe a little sharp. May not last as Mr. Koch,the maker, died a couple of years ago, and I don't know whether his son is just selling what's left or continuing manufacture. Prices have not changed very much, which means they are a bargain, made of good woods.

Instruction books: the Trapp Family book, "Enjoy your Recorder," is fine if you are learning with someone who plays the same size as you. However, most duets are for soprano + alto, and if you learn with spouse, lover, friend, or someone you will want to play with later (ie not "teacher") then the book by the late Erich Katz (can't remember name) is best, it has soprano + alto. Soprano is in C, alto in F, so fingerings are all different.

Other books: I really haven't transmitted much of the enjoyment you can get out of making your own music, or how sweet a group of recorders can sound, the bigger the better, up to maybe 8. You will enjoy playing more if you know what you are doing, historically. The best book for this may be a little difficult to find, but it is a real joy: **The Amorous Flute**, by John Manifold, London Workers' Music Assn., 1948, 48pp, $1.25, paper, maybe from Hargail, 28 W. 38th St., New York, NY 10018.

Recorder Technique, A. Rowland-Jones, Oxford Univ. Press, 1959. 159pp, paper, from Terminal. $3.45.

A Practical and Historical Sourcebook on the Recorder, by L.J. Schmidt, 1959, Thesis, Northwestern U, 1959, from University Microfilms, Mic 59-4837, Ann Arbor, Michigan. 623pp, paper, for $10 a bargain if you want to go into it this deeply.

MAKING IT: I have no experience here, but I have friends who have made lutes and harpsichords. One of my probs is lack of workshop and tools. For those who may be conveniently situated, the Kelischek Workshop in Brasstown, NC right near Georgia could be the answer. You can go there, live on the grounds, and get tools, parts, and instruction, and make yourself a lute, krummhorn, etc., cheaper than it can be bought.

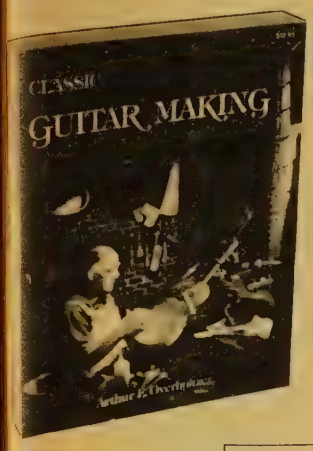
QUESTION: I would love to get a Shenai, but my letters to Carroll Sound have gone unanswered. Do you know of other sources? Do you know what the story is on Carroll? (exotic instruments place in last WEC, p. 336).

Namaste,
Frank & Louise Deis
Highland Park, NJ

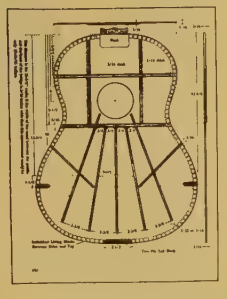
Classic Guitar Making

This is a first-rate book. . . a practical guide that begins with woods, tools and basic principles, and takes you through the steps, techniques and tricks of guitar making. Overholtzer has made a remarkable number of superior instruments and has taught guitar making at California State U. at Chico. As a bonus to the clear and precise material Overholtzer has assembled, there's an article by Rose-Ellen Leonard that'll be welcomed by anyone who's ever had trouble working with Rosewood. I hope that, in subsequent printings, the photographs will be better done. Except for this flaw, Guitar Making *is a winner!*

—Scott Beach



Classic Guitar Making
Arthur E. Overholtzer
1974; 325pp.
$12.95 postpaid
from:
Lawrence A. Brock
1929 Mangrove Ave.
Chico, CA 95926
or Whole Earth



Anyone with a beautiful singing voice can sing without effort; those who must strain their face or other muscles do not have the best voices. This has been known to voice teachers for many years. Odd as it may seem, a sound produced by a mechanical device has the same effect. A pleasing, joyful sound is magnified by a material that is at ease. . . The guitar with the least stress in its parts, after it is made and tuned, will produce the best sound. . . This is one reason why no factory will ever make a guitar which will sound as well as a hand-made guitar made by a craftsman who understands this principle. Here is still another illustration: If a violin which has been completed for several years has the back and top taken off its ribs and glued back on again without doing anything to the wood, the violin will have a better sound. The back and top will shrink more than the sides, and the ribs won't go back on the same place, because the top and back wood will have shrunk more than the sides. There is also more shrinkage across the grain than along it. Before the violin was pried apart, there was tension on the whole instrument. When the top and back are glued to the sides again, they cannot be glued back into the same places, since they will have shrunk more than the sides.

Guitar Repair Manual

Includes electric in its coverage of manageable amateur home repairs.

—SB

Guitar Repair Manual
Magazine Staff
Guitar Player
1971; 31pp.
$2.95 postpaid
from:
Oak Publications
33 W. 60th St.
New York, NY 10023
or Whole Earth

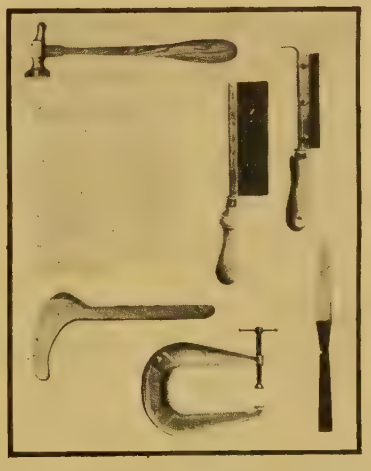
The vast majority of times that an electric guitar goes dead, the cause is a defective pickup. As a rule, pickups cannot be repaired, and should be replaced.

Guitar Repair

This is a valuable companion to Sloane's fine previous work, Classic Guitar Construction *(Pg. 333). Virtually every ailment that may befall a guitar is treated in this well-illustrated manual. Cracks, fractures, warping, things coming unstuck. . . and all the loving care needed to restore a damaged instrument to mint condition. Anyone with woodworking experience can make use of the techniques shown. Guitar Repair is a basic book for anyone who owns, plays, makes or sells guitars.*

—Scott Beach

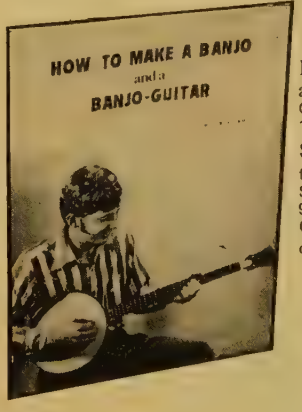
Guitar Repair
(A manual of repair for guitars and fretted instruments)
Irving Sloane
1973; 95pp.
$8.95 postpaid
from:
E.P. Dutton & Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth



How to Make a Banjo and a Banjo-Guitar

Make a nice instrument. Make a nice sound with it.

—SB



How to Make a Banjo and a Banjo-Guitar
G. W. Stamm
1971; 24pp.
$3.00 postpaid
from:
Stamm Industries
905 Washington St.
Oregon, IL 61061
or Whole Earth

An inexpensive substitute for C-clamps holds strips of wood in circular form. Regular nuts can be used instead of wing nuts.

The Guitars Friend

Through the Guitars Friend *you can get many instruments at 25% off list price. They handle Yamaha, Guild, Gibson, Martin, Harmony, Ovation, Dobro and other guitars, and a variety of dulcimers, autoharps, harmonicas, recorders, fiddles and banjos, including their own Lake Banjos. Books at 10% off. Strings and miscellaneous musical hardware, at attractive discounts.*

—Scott Beach

Catalog
from:
The Guitars Friend
1240 Brogan Road
Stockbridge, MI 49285

Autoharps are fun. We all played with them in kindergarten. Just push the button and make music. Wheee! We discount these 25%.

Luthier's Supply Directory

For $1 this is a good compact annotated list of suppliers, tools, books, periodicals, etc. for the maker-repairer of stringed instruments.

—SB
[Suggested by Steve Everett]

Booklet
1973;
$1 postpaid
from:
Greenleaf Music Ltd.
Rt. 2, Box 149
Greenville, NY 12083

C. C. Richelieu
215 So. Washington St.
Wheaton, IL 60187

Banjo parts and accessories. Manufactures all bridges for Gibson guitars. Catalog free.

The Guitar Center
International Guitar and Import Co.
P.O. Box 15444
Tulsa, Okla. 74115

Materials and supplies for guitar, banjo and mandolin making. Also there is a separate catalog for books on fretted instrument construction. Free catalogs.

Marina Music
1892 Union St.
San Francisco, CA 94123

Complete line of woods, materials, books, plans and tools for fretted instrument construction. Free catalog.

Vitali Import Co.
5944 Atlantic Blvd.
Maywood, CA 90270

Complete line of guitar and dulcimer making tools, materials, accessories and parts. Very extensive book list on all areas of instrument building. Catalog $2.00.

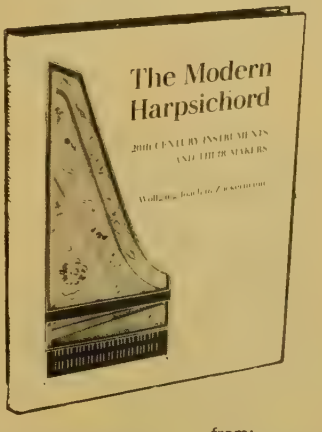
James C. Boyce
Guitarmaking
Box 608
North Falmouth, MA 02556

High quality bronze wound and classic guitar strings manufactured to Mr. Boyce's specifications. The cost for most strings is $10 for six sets. Free price sheets and order forms.

The Modern Harpsichord

Zuckerman is the world's foremost harpsichord freak. His kits have brought the instrument within reach of most people. The Modern Harpsichord *is basically a directory of makers throughout the world, with excellent critiques and descriptions. I've worked on a Zuckerman kit. The instrument came out ok, but not hassle-free. It's a good idea to have the phone number of an experienced cabinet-maker.*

—Scott Beach



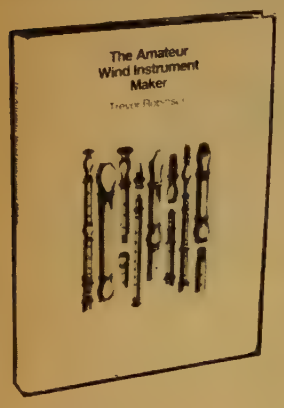
The Modern Harpsichord
(20th Century Instruments and their makers)
Wolfgang Joachim Zuckermann
1969; 255pp.
$8.00 + postage (2-3/4 lbs)
from:
Peter Owen Ltd.
12 Kendrick Mews
Kendrick Place
London S.W. 7
England
or Whole Earth

COMMUNICATIONS

The Amateur Wind Instrument Maker

Robinson has put together an excellent guide, both for craftsmen and for musicians. The book includes lucid descriptions of the materials and methods for making a number of wind instruments, and includes detailed plans for making flutes, recorders, oboes, shawms, trumpets, and many others. This is not a handbook for whittling hobbyists, but a how-to-do-it manual for serious craftsmen.

—Scott Beach



The Amateur Wind Instrument Maker
Trevor Robinson
1973; 132pp.
$8.95 postpaid
from:
Univ. of Mass. Press
505 East Pleasant St.
Amherst, MA 01002
or Whole Earth

How to Make and Play the Dulcimore

The dulcimore (or dulcimer, dulcmer, dolc-amore, or hog-fiddle) is enjoying a great new popularity. Chet Hines' book is one of the best I've seen. Plans and detailed steps are fully illustrated, and the lore of this marvelous instrument is served-up in rich helpings.

—Scott Beach

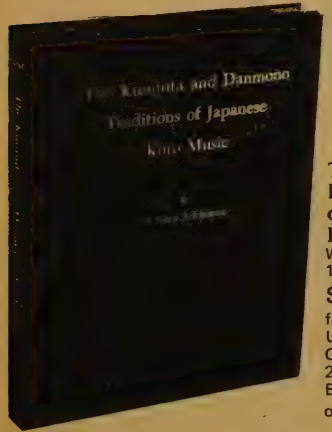
How to Make and Play the Dulcimore
Chet Hines
1973; 157pp.
$9.95 postpaid
from:
Stackpole Books
Harrisburg, PA 17105
or Whole Earth

FRETS Frets are small ridges fixed across the fingerboard. They are made of metal, ivory, bone, staghorn, or wood. When the string, which is at right angles with the frets, is pressed down, the fret tends to stop the string, thereby changing its pitch. Frets on this dulcimore are made of German silver and extend the full width of the fingerboard. On many of the old dulcimores, however, they were much shorter, allowing only the melody string to be stopped.

The Kumiuta and Danmono Traditions of Japanese Koto Music

An historical introduction to the koto instrument and an extensive discussion of instrumental technique and repertoire. This book will be invaluable to English speaking students of the instrument, since to my knowledge there is no other book available in English with comprehensive information regarding koto performance.

—Shige Uchiyama



The Kumiuta and Danmono Traditions of Japanese Koto Music
Willem Adriaansz
1973; 493pp.
$20.00 postpaid
from:
University of California Press
2223 Fulton St.
Berkeley, CA 94720
or Whole Earth

Quality Music

Here's some music rap:

Ali Akbar College of Music
P.O. Box 956 S
San Rafael, CA 94902

and

American Society for Eastern Arts
2640 College Ave.
Berkeley, CA 94704

with its center for World Music are doing amazing things towards bringing people together to share a common language under the guidance of master teachers.

ASEA offers classes in music and dance from Bali, China, Japan, Java, Korea, Middle Ages & Renaissance, North and South India, Turkey, and West Africa and they are doing it at a reasonable cost.

A.S.E.A.

AACM offers year-round studies in No. Indian classical music under the direction of Ali Akbar Khan (whom Julian Bream called the greatest musician in the world). The chance to study with someone of Ali Akbar's genius —— certainly equivalent to Segovia, Heifitz or Gould—— in Eastern music—— for $275 for daily classes for two months is ludicrously low compared to the $75-$100 for master classes that western artists charge.

ASEA's program has just expanded this year and looks like it'll be the most remarkable assembling of musical tradition in the history of this planet. If they get the interest and foundation financial support monies (both institutions are always open to donations) they will continue the program thru the year.

New Music Distrib. Service. Working valiantly to get contemporary improvisational music (Jazz is such a loaded term—— tho easier to say) to you with minimal interference from the music industry & maximal return to the artist. Big catalog—— regular mailings, New Music Distribution Service, 6 West 95th St., New York, NY 10025.

Same with Mary Lou Webb. M. Webb Disques, P.O. Box 272, N. Hollywood, CA 91603.

—John Scoville
Santa Cruz, CA 95060

Bluegrass Fiddle
Bluegrass Banjo

Making music that makes people dance. Nothing else does it so well.

—SB

Blue Grass Banjo
Peter Wernick
1974; 143pp.
$4.95 postpaid

Bluegrass Fiddle
Gene Lowinger
1974; 64pp.
$3.95 postpaid

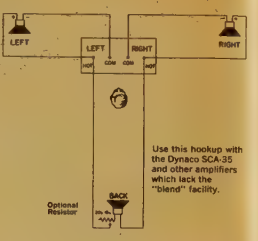
both from:
Oak Publications
33 W. 60th St.
New York, NY 10023
or Whole Earth

Dynaco 4 Dimensional Sound System

Many recordings (particularly those including a live audience) have inadvertently included mixing that can be separated into a front-back signal in addition to the usual stereo effect. This can often be done with no additional equipment other than speakers. These folks tell you how, and also sell equipment of good repute such as a powerful amplifier that's circuited to prevent speaker destruction. *(See Pg. 326.)*

—JB

Information:
Dynaco
3060 Jefferson St.
Philadelphia, PA 19121



Robinson's Harp Shop

Folk harps, finished ($195-$695) or kits ($95-$350), and parts.

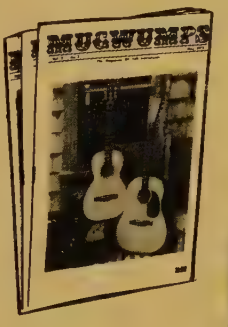
—SB

Catalog
from:
Robinson's Harp Shop
Mount Laguna, CA 92048

Mugwumps

A special little magazine for folk instrument fanciers.

—SB



Mugwumps Instrument Herald
$5.00 /yr (bi-monthly)
from:
MIH
P.O. Box 1171
Bowling Green, KY 42101

The people at Gurian Guitars Ltd. have come up with the first in what will be a series of kits: The Dixieharp, which is the tradename for what is a small zither or psaltery. The Dixieharp is above all else, simple—— simple to build and simple to play, but not simple in elegance of sound or appearance. The wood is mostly maple and cut accurately to the basic shape of the harp. Some cutting of ends is required but nothing that calls for a special saw. In fact the harp is built with masking tape and regular glue like Elmer's—— simple tools for the beginning instrument builder.

For information regarding the Dixieharp, Gurian guitars, or purchasing wood for building write to Gurian Guitars Ltd., Canal St., Hindsdale, NH 03451.

The Banjo Newsletter

"The BNL is a forum for three-finger Bluegrass pickers to contribute and exchange ideas, licks, scales, songs, information, etc."

The Banjo Newsletter
Hub Nitchie, Ed.
$6 /yr (monthly)
from:
Hub Nitchie
1310 Hawkins Lane
Annapolis, MD 21401

High Fidelity

There's a theory that says the faster the speed involved in a mechanism, the faster the pace of obsolescence and introduction of new ideas. So it is that HiFi equipment is hard to say anything about unless you want to keep talking. And then there's the variables that come from manufacturers quarrelling; witness the quadrophonic mess. So what does a person do when they want to buy some hardware? There seems to be a modest agreement on this:

1. Start with the best speakers you can afford and work towards the other hardware. (Try 3 different sets of speakers, and you'll hear 3 distinctly different sounds. Try 3 different tuners using the same speaker set and it's doubtful you'll hear any difference.) The speakers make the sound you hear. Once their requirements are known, the choice of other hardware becomes much easier.

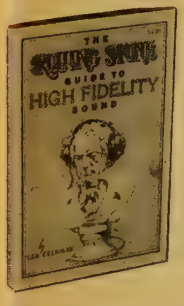
2. Buy stereo components that permit addition of whatever quad system is finally agreed upon by industry.

—JB
[Special thanks to Pud's in Albany, CA for helping tie up a lot of loose ends.]

The Rolling Stone Guide to High Fidelity Sound

A very non-technical introduction to the HiFi dept. and its wares. The intent is to enable you to make good decisions in equipment purchase and use. Though not quite as complete as some other books, it isn't exhausting to read. (It's the only book on the subject I've been able to get through.) An unfortunately overpriced, but truly useful map of a tangled area.

—JB



The Rolling Stone Guide to High Fidelity Sound
Len Feldman
1974; 160pp.
$4.95 postpaid
from:
Straight Arrow
c/o Western Book Service
P. O. Box 3975
Rincon Annex
San Francisco, CA 94119

The sad truth is that as FM has become more and more popular, FM station practices have become sloppier and sloppier. It's fair to say that the best tuners around today can reproduce signals better than most stations are transmitting them.

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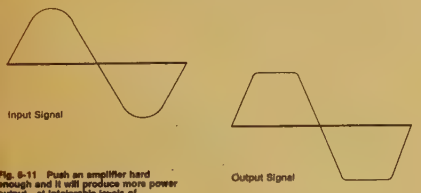


Fig. 6-11 Push an amplifier hard enough and it will produce more power output—at intolerable levels of distortion.

. . . keep pumping in more signal to that poor amplifier, eventually you will reach a point where the output signal looks like the diagram of Fig. 6-11: an overdrive, clipped, totally distorted signal bearing scant resemblance to the one we started with. The wattmeter will read 20 watts under these conditions. The distortion meter (if anyone cared to use one) would read 50 percent—— which means there is as much undesired signal coming out as there is desired fundamental signal! And that's how so-called "peak power" ratings were born. Totally meaningless but used by the low-fi people to promote inferior equipment purely on a high wattage basis.

•

Some general rules applicable to almost any listening room:
1. If you are going to carpet the floor, don't treat the ceiling with acoustic tile or other absorptive material.
2. Only one of each pair of walls should be treated with absorptive material such as draperies.
3. Try not to place your phonograph equipment too close to either speaker. Otherwise speaker vibrations might get back into the tone arm, causing acoustic feedback.
4. Try to provide more than one chair located for good stereo listening. If you don't you'll end up giving the "stereo seat" to your guests and miss hearing your own system properly.
5. If at all possible arrange the equipment (particularly the controls) within arm's reach of your favorite listening position.
6. If the sound you end up with doesn't seem to be as satisfying as that which you heard in the dealer's showroom, don't be afraid to use the tone controls on your receiver or amplifier. Remember: used in moderation they can add just the tonal emphasis you feel is lacking.

Hi-Fi Equipment

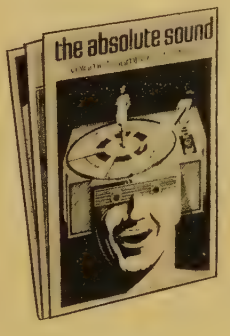
Dear Whole Earth Epilogue people, . . . a few notes for those who want good sound at a good price: SPEAKERS: best sound per dollar is right around the $100/speaker level. Listen to as many of these as you can before you buy: EPI 100, Dynaco A-25, KLH 17, big Advent. Speaker preferences are *heavily* a matter of personal taste. Below that price level there is little but the Dynaco A-10. Above the $200/pair level an infinity of taste treats for your ears. Listen to both types of base, JBL L-100's, Rectilinear III'S, plus KLH electrostatics. AMPS: for most speakers in most rooms at most sound levels 30 watts rms per channel is all you need. At that power level the best amp/dollar is the Marantz 1060.Below that in price, not much quality is available, although Dynaco makes some decent kit amplifiers for those on a tight budget. Above that, the biggest Pioneer integrated amp, (i believe its called the 9100), with more than 80 watts/channel, is a nice tool for those with big power needs. If you can stand what's on the radio and want a receiver (combination amp and AM/FM tuner) check out the Harman-Kardon and Pioneer lines. HEADPHONES: the Sennheiser 4D-414's are *the* best deal in headphones. . . . Mail order discount houses: Warehouse Sound Co., Railroad Square, San Luis Obispo, CA has the best catalog, 10 cents the last time I looked, but for the best prices and good service I believe Midwest HiFi, 2455 Wisconsin Ave., Downers Grove, IL 60515 or 3309 East Carpenter Freeway, Irving, TX 75062 has no match in America.

Love, good times, good sound
John Knoerr
Mansfield, OH

The Absolute Sound

Anyone who is seriously interested in "state-of-the-art" high fidelity, and this means the very best sound available, should not be without a subscription to this informative new publication. Containing equipment and record reviews, outspoken editorials and articles, and little if no advertising, this quarterly ranks (along with Stereophile*) as the only authoritative magazine on the subject available in the U.S. today. Be forewarned, however,* The Absolute Sound*, though it speaks a non-technical and rather subjective language, is primarily geared toward the most discriminating audiophiles.*

—Gary Saluti



The Absolute Sound
$8 /yr (four issues)
from:
The Absolute Sound
Box 115
Sea Cliff, NY 11579

Discounts and Cartridges

More HiFi Discount houses:

Dixie Hi-Fidelity Wholesalers
5600 2nd St. N.E.
Washington, DC 20011

Illinois Audio
12 E. Delaware
Chicago, IL 60611

Stereo Wholesalers
7A Aylesbury Rd.
Timonium, MD 21093

Clifford's Hi-Fi Wholesalers
231 W. Court St.
Kankakee, IL
60901

International Hifi Distributors
6330 Frankford Ave.
Baltimore, MD 21206

Grado phono cartridges

Grado Laboratories, the firm that makes inexpensive high-quality cartridges, has done it again. Now it's their FTR +1 which tracks at 1 to 2 grams, lists for $11.95, and is usable for discrete (CD-4) or matrix quad, or for two-channel stereo. In CD-4 use it doesn't require special low-capacitance cables between turntable and amplifier, as do most CD-4 cartridges, because it has little capacitance of its own. A test report on the FTR +1 appears in Stereo Review for Feburary 1974. In a nutshell: "As a two-channel cartridge, it ranks with a handful of the finest, all of which sell for four to six times its price. For playing CD-4 records, our sample was the equal of any cartridge we have used." Too much!

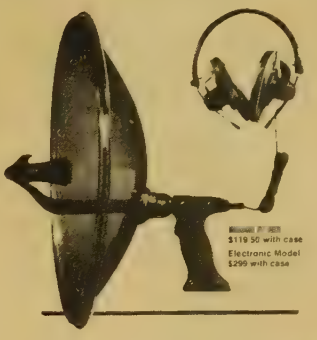
Information on these and other Grado cartidges is available from Grado Laboratories, 4614—— 7th Ave., Brooklyn, NY 11220. Their lowest-priced cartridges seem to get all the attention. Does anyone know if their more expensive ones are proportionately good?

Andy Buc
San Francisco, CA

Timekeeper

Ever try to edit a tape only to be maddeningly thwarted by tape stretch or losing accurate track of where you are? With a timer your troubles are over, because they respond only to actual tape transport, not time. These people also make a well-regarded "spy" long distance microphone system.

—JB



The Standard Model is calibrated for 7.5 and 3.75 ips and can also be used at 15 ips. Dimensions are 1⅞" x 3¼". It is priced at only $59.95

Catalog
from:
Timekeeper
P.O. Box 835
Great Neck, NY 11021

When you rewind the tape, the pointer will be automatically moved back by the space of time exactly corresponding to the rewound length. You are free to stop, rewind, fast forward, or forward the tape even continuously and repeatedly without deranging the timing on the machine, thus prohibiting errors. These excellent characteristics will enable you to simplify the most complex procedure of editing, revising and otherwise processing your tape recording.

Speakerlab

Apparently there are actually very few manufacturers of speaker components in this country. They sell the parts to the brand-name speaker-makers who put them together—— for a price. Speakerlab sells parts and you assemble. If you do a good job (essential) you get a lot more speaker for the money. We've heard some nice things about these people. They offer advice with the device.

—JB

Catalog
from:
Speakerlab
5500 35th N.E.
Seattle, WA 98105

S1s W800A woofer, DT50 tweeter, X1 crossover. . . $26
E1 Unfinished walnut veneer enclosure (alone $30) when with S1s. . . $18 each
S1k Complete kit—— all above plus fiberglass, grille cloth, etc. . . . $44 each
S1a Assembled and finished version of S1. . . $72 each

Recording Engineer

So you're getting into recording, making demos and such. RE/P helps us little guys make that quantum hop from consumer machinery/livingroom studio to bigtime pro (on paper, at least). Great source of nitty-gritty goodshit information that can readily be distilled to the scale of the micro-budget semipro recording endeavor, like mine.

—E. Todd Ellison
Glendale, CA

Recording Engineer/ Producer
$6.50 /yr
(free to professionals)
from:
Recording Engineer/ Producer
6430 Sunset Blvd.
P.O. Box 2287
Hollywood, CA 90028

ELECTRONIC MUSIC

by Don Buchla

Don Buchla is a designer-builder of electronic music instrumentation in Berkeley, California.

—SB

SOFTWARE

Recent years have witnessed a coalition in hardware function and a consequent refinement of technique that provide us with some common ground for communication. A former information vacuum is now occupied by a respectable body of literature that includes several excellent books and a worthy periodical.

Many current books deal with seemingly arbitrary combinations of various aspects of electronic music— future works will hopefully exhibit increased focus and might even carry meaningful titles. To assist you in selecting books that address your areas of interest, I've prepared a multidimensional table, with numbers that indicate the coverage that each author grants to particular topics. These numbers primarily indicate depth of coverage, but are occasionally influenced by accuracy and comprehensibility.

-	=	no treatment
1	=	incidental (en passant)
2	=	superficial treatment
3	=	introductory treatment
4	=	comprehensive treatment
5	=	exceptionally thorough

To clarify a couple of table headings, "general" implies applicability to a wide range of current instrumentation; "specific" refers to qualitative, frequently comparative data about specified brands of instrumentation. And "classical" technique, for the sake of this presentation, is *in addition to* rather than *inclusive of* "tape" technique.

The Technique of Electronic Music, Thomas Wells & Eric S. Vogel, 1974; 291pp., about $10, from University Stores, Inc., P.O. Box 7756, Austin, TX 78712.

The authors contend that "a knowledge of the basic technical processes of electronic music production is essential for those working in this medium." Their presentation "assumes a rudimentary knowledge of mathematics," is clearly written and illustrated, technically accurate, and abundantly referenced.

The Development and Practice of Electronic Music, Jon H. Appleton and Ronald C. Perera, editors, 1975, about $12, from Prentice—Hall, Inc., Box 500, Englewood Cliffs, NJ 07632, or P.O. Box 18501, Salt Lake City, UT 84118.

A comprehensive study by six authorities, each reporting in depth on a particular aspect of the art. Contributors are: Otto Luening, A. Wayne Slawson, Gustav Ciamaga, Joel Chadabe, John E. Rodgers, and Gordon Mumma. Available soon.

Electronic Music Synthesis, Hubert S. Howe, Jr., 1974, $12.50, from W. W. Norton & Co., 500 5th Ave., New York, NY 10036.

A lucid, thorough guide to current studio instrumentation and technique, intended for and appropriate to the presentation of advanced technical courses.

Introduction to the Physics and Psychophysics of Music, Juan G. Roederer, 1973; 161pp., $5.90, from Springer Verlag, New York, Inc., 175 Fifth Ave., New York, NY 10010.

Sound, being the stuff that music is made of, should be of considerable interest to musicians. This is the most thorough and clearly presented, not-too-technical explanation of sound that I've encountered.

The Music Easel Weasel

Electronotes: Newsletter of the Musical Engineering Group, B. A. Hutchins, editor & publisher, $6/year, from Musical Engineering Group, 203 Snyder Hill Rd., Ithaca, NY 14850.

Electronotes is a bimonthly newsletter established in 1972 to facilitate communication among engineers and musicians interested in the design and construction of electronic music hardware. Schematics and construction details are accompanied by theory and application notes; product reviews, surplus sources, literature reviews and classified ads are regular features. A much needed and beautifully executed endeavor.

Electronic Music Systems: Structure, Control, Product, Frank L. McCarty. To be published in a forthcoming issue of **Perspectives of New Music**. Princeton Univ. Press, Princeton, NJ 08540. $6.00 semiannually or $5.00 per copy.

This article is a thorough enumeration and evaluation of the design philosophies and hardware characteristics of currently available systems. Directed to designers as well as musicians, McCarty suggests numerous improvements.

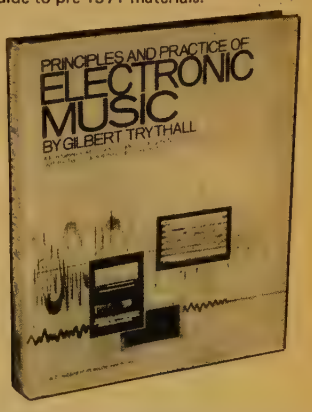
The Evolution of Electronic Musical Instruments in the United States, Thomas L. Rhea, 1972, 250pp., from University Microfilms, 300 N. Zeeb Rd., Ann Arbor, MI 48106

A fascinating, remarkably thorough compendium of musical instruments and their inventors. Illustrations are not included in this edition, but might be obtainable from the author (Box 274, Hendersonville, TN).

The synchronous motor used in the instrument was first used by Laurens Hammond in an electric clock, the first product of the Hammond Company. When the depression caused this market to be flooded with similar clocks, Hammond, an inventor of considerable talents, invented a device that shuffled a pack of playing cards into four piles, and he built the device into a bridge table. Some 14,000 of these devices were sold in 1932, but the line was discontinued again due to the depression. In 1933, Hammond began to search for ways of using his synchronous motor in a new product. After two years of research, with the help of John Hanert, a research engineer, Hammond constructed and patented his now-famous instrument.

Electronic Music: Systems, Techniques, and Controls, Allen Strange, 1972, 160pp., $3.95, from Wm. C. Brown Co., 2460 Karper Blvd., Dubuque, IA 52001.

A practical operations manual for composition and performance. Organization is by process, with each section offering appropriate acoustic fundamentals, extensive information on technique, and, frequently, application examples via patch charts, actual scores, and references to commercially available recordings. The annotated bibliography is an excellent guide to pre-1971 materials.



Principles and Practice of Electronic Music Gilbert Trythall, 1973; 213pp., +7" record, $5.95, from Grosset & Dunlap, Inc., 51 Madison Ave. New York, NY 10010.
A comprehensive introductory course, with emphasis on tape recording and classical studio technique.

Biofeedback and the Arts: Results of Early Experiments, David Rosenboom, ed., 1974, about $10.00 from, Aesthetic Research Centre of Canada, Publications Dept., P.O. Box 3044, Vancouver, B.C., Canada V6B 3X5.

Rosenboom and his collaborators are engaged in work that has profound implications for the creative arts. This wide-ranging collection includes schematics and construction details for low-cost bio feedback instrumentation, elucidation of some problems and possibilities concerning live electronic music performance, and scores for "Brain Music for John and Yoko" and "Portable Gold and Philosophers' Stones (music from brains in fours)." Excerpts follow.

I am not very interested in art-world conceptual game playing. I am interested in realization.

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We began to realize that one of the most likely developments in the performance of music will involve the direct use of brain electrical outputs by means of electronic pick-up systems and we have obtained quite dramatic results in this way.

•

If there is anything of real significance that a musician could teach the world of the scientist, it is how to live intimately with his own theory.

•

We must beware of a new inquisition. The choice of what should be the next note should be simultaneously life's most important work and an arbitrary one.

•

Electronic Music: A Listener's Guide, Elliott Schwartz, 1973; 306pp., $12.50, from Praeger Publishers, Inc., P.O. Box 1323, Springfield, MA 01101. **The Liberation of Sound: An Introduction to Electronic Music**, Herbert Russcol, 1972; 315pp., $10, from Prentice-Hall, Inc., Box 500, Englewood Cliffs, NJ 07632, or Box 18501, Salt Lake City, UT 84118.

Two books that deal primarily with contemporary electronic music and its roots. Both have extensive discographies. Elliott Schwartz includes description of modern instrumentation. Herbert Russcol provides us with chronologies, anecdotes, and extensive quotations. Some Russcol excerpts:

Asked who was doing the best work in electronic music, Xenakis replied "The Bell Telephone Company".

•

. . . the story goes that his piece, "Kontakte", was originally devised for four percussion players, who, confronted by the problems posed, took to drink, so that Stockhausen was obliged to realize three parts by electronic means.

•

All this brings us to the fascinating thesis that the nature of the Buchla machine-beast itself decidely influenced the sound of (Subotnick's) music.

[Let's hope so. (D.B.)]

The New World of Electronic Music, Walter Sear, 1972, 131 $4.95, from Alfred Publishing Co., 75 Channel Drive, Port Washington, NY 11050.

A well organized introductory primer.

Basics		Electronics			Instrumentation			Music			Technique								Reference		
						Current															
Acoustics	Psychoacoustics	Theory	Circuitry	Construction	History	General	Specific	History	Contemporary	Tape	Classical	Synthesizer	Performance	Studio Design	Computer Music	Notation and Scores	Form and Aesthetics	Suggestions & Speculation	Bibliography	Discography	Author
3	4	2	–	–	4	4	3	5	4	4	3	2	1	4	4	3	3	3	4	5	Appleton
3	3	–	–	–	–	5	–	–	–	4	2	4	–	3	4	–	–	3	4	–	Howe
3	1	4	5	4	–	3	2	–	2	1	–	2	–	–	1	–	2	1	3	2	Hutchins
–	–	–	–	–	–	4	4	–	–	–	–	2	–	1	–	–	–	4	4	–	McCarty
–	–	–	–	–	5	4	2	1	1	–	–	–	–	–	–	–	–	5	–		Rhea
4	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	4	–		Roederer
–	–	–	–	–	3	–	–	5	4	–	–	–	–	–	3	–	4	3	4	5	Russcol
–	–	–	–	–	3	4	3	4	4	3	–	–	1	–	3	3	4	4	4	4	Schwartz
2	1	2	–	–	–	3	2	–	–	3	1	2	–	1	–	–	–	–	–	–	Sear
2	1	1	–	–	–	4	1	1	3	4	1	5	4	1	–	2	–	–	5	1	Strange
3	1	3	3	–	3	2	3	2	2	3	3	3	2	–	1	2	3	1	3	1	Trythall
3	3	4	4	2	–	3	1	–	1	4	1	2	–	4	–	2	1	–	4	–	Wells

HARDWARE

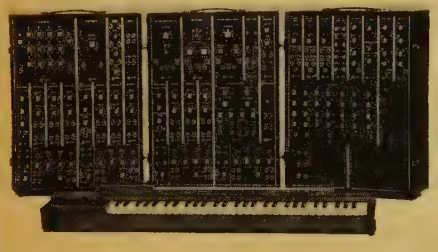
This section will present representative electronic music instrumentation other than electronic organs and amplified acoustic instruments, and a thought or two about nomenclature. I leave (most) description and evaluation to the cited references (particularly those with high "specific current instrumentation" ratings) and to the data that manufacturers will obligingly send you on request.

By reason of marketing glamour, or perhaps to convey the sense of security that accompanies classification [The Baggage Inspector pales and trembles. I say "Synthesizer." He echoes, "Oh, synthesizer," and waves me on.] all but one of these instruments have been labeled "synthesizer." Many are not. They are limited-function musical instruments that are particularly vulnerable to early technological and aesthetic obsolescence. A *synthesizer* allows the *musician* (not some design engineer, with his probably romantic preconcepts of what music is and isn't) to establish the relationships between various input stimuli, functional constituents, and potential responses of the instrument.

As long as we're on the subject, let's note that synthesizers are used to create *synthesized* music, not *synthetic* (artificial) music. Electronic music is *real* music, and is imitative (in both form and quality of sound) only to the extent that a musician chooses. [I think this is the first (and maybe the last) occasion on which I've used the word "synthesizer" in print, and I join Walter Carlos in expressing the futile wish that this ambiguous, meaning-sucked word would quietly disappear from all human tongues.]

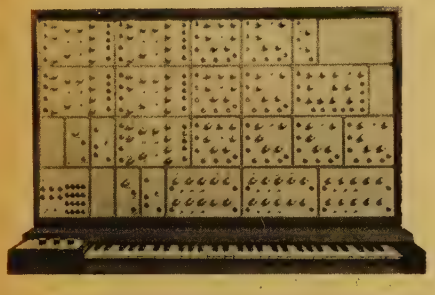
A word of caution—— sales literature usually has more emotional appeal than useful information—— consult alternate sources before buying. Periodicals should be better, but those in the E.M. field have a habit of becoming commercial mouthpieces (through acceptance of substantial editorial assistance from "helpful" manufacturers). The authors of the books I've cited are generally well acquainted with a variety of hardware; all attempt to present accurate, unbiased data. Best to check with user/owners, attend E.M. concerts, listen to available recordings, and personally evaluate instrumentation *in terms of your own musical sensibilities and objectives.*

These are modular systems that can be configured to suit a variety of tastes and budgets:



Moog Synthesizer IIIp
from:

Norlin Music Inc.
7373 N. Cicero Ave.
Lincolnwood, IL 60646



Eμ Synthesizer
from:

Eμ Systems
3455 Homestead Rd.
Santa Clara, CA 95051

Moog is a pioneer in the development of voltage controlled instrumentation—— his systems are found in studios everywhere. Eμ and Total Technology (1346 Bayport Ave., San Carlos, CA 94070) are newcomers to the field. Fundamentally similar to the Moog, their systems offer several engineering innovations.

Electronics technology and access to information have improved to the point where a dedicated electronic musician can successfully build his own equipment from kits or from scratch. The economic advantage can be considerable, and there's a lot to be said for being in charge of your own trip:

Electronic Organ Kit

$10.95
from:
Tandy Corporation
Forth Worth, TX
dist. by Radio Shack

What we want is an instrument that will give us a continuous sound at any pitch. The composer and the electrician will have to labor together to get it.

—Edgard Varese, 1922

PAIA 2720
$139
from:

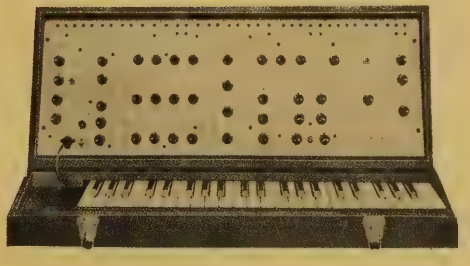
PAIA Electronics
Box 14359
Oklahoma City, OK 93114

While hardly an organ, the Tandy kit must be the world's cheapest intentional electronic instrument. PAIA's kits are modular, and would seem to be an excellent way to get your feet wet. Higher in cost and performance are submodules from Eμ systems (address elsewhere), who offers substantial application assistance. And for a continuing source of schematics, theory, and access information, check out Electronotes (op.cit.).

Flexible, portable, non-modular systems, popular amongst electronic music performers and educators:

Synthi-AKS
$1995
from:

Electronic Music Studios
408 E. 78th St.
New York, NY 10021



EML-101
$1295
from:

Electronic Music Labs
P.O. Box H
Vernon, CT 06066

ARP 2600
$3000
from:

ARP Instrumments, Inc.
320 Needham St.
Newton, MA 02164

The following instruments enjoy considerable popularity among the home organ set and pop groups, offering "instant music" to anyone familiar with a keyboard:

Minimoog
$1595
from:

Norlin Music, Inc.
7373 N. Cicero Ave.
Lincolnwood, IL 60646

Soloist
$1195

from:

ARP Instruments, Inc.
320 Needham St.
Newton, MA 02164

Sonic Six
$1395
from:

Norlin Music, Inc.
7373 N. Cicero Ave.
Lincolnwood, IL 60646

Mini-Korg
$499.50
from:

Univox,
Dept. DB 111
75 Frost St.
Westbury, NY 11590

The claims made for these instruments are a shade less than conservative. A Moog brochure begins with, "Brutal, caustic, volcanic—— Evocative, flirting, caressing—— Crisp, powerful, biting—— Entrancing, embracing, exhilarating!" The Arp Soloist can "turn your organ into the 1975 model," is "powerful enough for the most demanding artist," and promises "instrumental voices that are as perfect as space-age technology can make them."

Good luck.

Biotelemetered Moon Walk

by C. Mark Nunn

An FM transmitted EMG signal from skin surface electrodes over the heart of a dancer was used to control rhythmic elements of an electronic music synthesizer. Other dancer-controlled sound manipulation was achieved with electro-goniometer potentiometers across elbow and knee joints. For the elgons to function as circuit modulators, the dancer was attached to the synthesizer by an "umbilical cord". The cord, along with the costume of a fire entry suit (silver) complete with gloves, shoe socks, and visored helmet with a plexiglass antenna, created the extra-terrestrial appearance. Since all music functions were manipulated by the dancer, a feedback loop was operative. Actions of the dancer influenced successive actions via instantaneous auditory feedback.

PRESENTED: March 24, 1973
York University

DANCER: Carolyn Shaffer

——Biofeedback and the Arts: Results of Early Experiments

WHY, HOW AND WHERE TO BECOME A RADIO AMATEUR

by Wes Plouff

I. Why become a radio amateur? Ham radio is a means of communications proven cheap, reliable and effective. During and after an emergency, ham radio has time and time again been often the best and just as often the only link with the outside world. With a 200-watt transceiver and a modest antenna you can make friends all over the world. On the other side of the coin, amateur repeater stations (about 600 in the US) will let you use walkie-talkies and other low-power equipment to talk over 20-50 mile ranges.

Ham radio is full of fascinating sidelines. Hams are working in high-speed cw (Morse code), very low power transmitters, radioteletype, moonbounce, and all types of experimentation from long- to microwaves. You can send fast-scan (ordinary) tv to the horizon or slow scan tv around the world. The Amateur Satellite Corp. has put up Oscar 6, the world's only open-access communications satellite. Limited by power available to operating three days a week, since November 1972 Oscar 6 has passed conversations between thousands of hams around the world. Oscar 7, an internationally designed and built sister ship, will go up in 1974.

All American radio amateurs get their licenses from the Federal Communications Commission. Novice, or beginner's licenses are free and good for two years. To get one you must pass a pair of exams before another ham to prove you can send and receive Morse code at five words per minute and know elementary radio theory and FCC regulations. Higher classes of licenses cost $9 for five years and can be gotten only at FCC examining points. There are 90 of these where FCC exams are held at least yearly, including the 29 FCC offices where exams are often held twice weekly. Most hams hold the General class license, which requires 13 wpm code speed and intermediate theory.

Equipment need not be expensive. A good beginner's station costs $50-150 with a little careful shopping. Most hams would think twice about investing $1000 in ham radio over ten years. Of course, home-built equipment is the ham's pride and joy, and costs as little as the builder is a good parts scrounger.

Right now you're probably wondering, "Why all this license and code hassle when I can get on the Citizens Band so easily?" Well, a CB license takes only an application and $20 fee, and most CBers don't bother with that. But until and unless the FCC cleans up the band, those 900,000 operators on 22 channels might best be described as inhabitants of a radio zoo.

So, what is the price of all these ham radio goodies? Not too many dollars, but a good bit of patience and dedication. You might meet a few interesting people on and off the air, too.

II. How can you get started in amateur radio? The best way is to meet a ham and talk to him. Finding your local radio amateurs may not be easy. Some places to look and ask are: the local newspaper, electronic wholesale stores, high school radio clubs, and the Red Cross. If you can find a store catering to hams, your problem is solved. Radio amateurs often put on code and theory classes in conjunction with the local school district, junior college or YMCA. If all this fails, try writing to the American Radio Relay League, Newington, Conn. 06111.

Once you've found your ham, explain to him your fascination with radio communication and your willingness to devote sufficient time to the hobby. The rest should take care of itself. Two cautions are in order, though. First, politics and religion are forbidden subjects for most amateurs; this taboo has survived for good reason for several decades. Second, any single woman trying to get a license will sooner or later run into a widespread "this is too complicated for you to understand" attitude in even the most well-intentioned of hams. Beyond this, though, your ham friends will bend over backward to help you.

Now that you've started on your way to earning a license, get ready to buy the necessary equipment. First, get **How to Become a Radio Amateur, The Radio Amateur's License Manual** (be sure to get a current edition), and **Learning the Radiotelegraph Code**, three books by the ARRL. They are packaged together as a "gateway package" which sells for $2.50. Sooner or later you should buy the ARRL **Radio Amateur's Handbook** for $4.50. To learn the Morse code you will need a good telegraph key and a code practice oscillator (cpo), which may put you back another $10. Headphones, which should *not* be the hi-fi type, will keep your roommates happy for a few more dollars.

In order to listen to signals on the ham bands, you will need a good receiver and antenna. The antenna need be nothing more than a long wire strung between insulators, though for best results when actually transmitting a tuned dipole antenna fed in the center with coaxial cable is almost a must. The receiver is half your station and the first large investment you will make in amateur radio. You will want a good communications receiver with a BFO or product detector. Communications receivers come in four types: general coverage in many small ranges, general coverage, general coverage with calibrated bandspread on the ham bands, and ham bands only coverage. The first kind is a deluxe receiver selling for over $1000, the second undesirable because it is hard to spread stations apart without bandspread. The last kind is the best if you don't care about short wave broadcasts, but most good models cost considerably more than $150, the price for an entire station.

We are left with the general coverage receiver with calibrated bandspread. There are several older models which you can buy used for rather little. Ask your ham friends for advice and have one of them inspect any used receiver before you buy. One other alternative is to build your own receiver or build a kit.

Buying a transmitter and getting a station on the air are two subjects best left to the hams helping you for explanation.

III. Where is the best place to get parts and information for ham radio or electronics tinkering in general? That question has no good, simple answer. In the past several years it has become next to impossible to get everything you need in one place, and some things are all but impossible for the nonbusiness buyer to obtain. Below are some semi-random thoughts on buying electronics books and parts.

Books: The American Radio Relay League wins this one hands down. Some ARRL books are classics (the **Handbook** and the **ARRL Antenna Book**) and all are guaranteed to be comprehensive and cheap. Not all of them are clearly written, though. Commercial book companies such as Sams and TAB have an unfortunate tendency to be expensive in terms of the real information they offer. Government publications (such as the **Navy Radioman** course) are likely to be good but dated.

Magazines: The Big Four in amateur radio are, with subscription prices:

QST, ARRL, Newington, Conn. 06111 ($7.50 as part of ARRL dues)
73, Peterborough, N.H. 03458 ($7)
Ham Radio, Greenville, N.H. 03048 ($7)
CQ, Cowan Publ. Corp. 14 Vanderventer Ave., Port Washington, L.I., NY 11050 ($6)

These magazines are often more informative than the books available, and should probably be bought in the order listed. Unfortunately, **CQ**, the worst of the four, is the only one with wide newsstand distribution. Most of the popular electronics magazines you find on the newsstand aren't worth a shit, so stay away from them. The only possible exception to this is **Radio Electronics**, but that, too has been going downhill.

Parts stores: Radio Shack and Lafayette Radio are okay for parts but considerably more expensive than most sources. Your local small wholesaler may or may not sell to the informed layman, but likely will sell to radio amateurs. Larger wholesalers are less likely to sell to individuals, but some will be very nice when you want to get hard-to-find parts. Some larger chains you might try are Newark, Allied Industrial, Hamilton/Avnet and Semiconductor Specialists. These stores may require a minimum amount if they have to back-order for you.

Mail order parts: The biggies, of course, are:
Newark Electronics, 500 North Pulaski Road, Chicago, Ill. 60624
Allied Electronics, 2400 W. Washington Blvd., Chicago, Ill. 60612

Newark's catalog is free, but there is a $15 minimum order. Allied used to be the best catalog house before Tandy Corp. (Radio Shack) took it over. Now it may become the best supplier once again. Catalog $1, minimum order unknown (probably $10). These two places often can supply newer parts not listed in their catalogs. In addition, there are a number of smaller outfits catering to the experimenter. Look for their ads in the back of ham radio magazines. A good source list appears in the construction practices chapter of the ARRL **Handbook**, this taken from an excellent article in the August (?) 1972 issue of **QST**. Most places have a $5 minimum order.

Surplus parts: There are two kinds of electronic surplus these days, military and industrial. The military kind is the traditional outdated radio gear, built to last forever. A good source for this is
Fair Radio Sales Co., 1016 E. Eureka St., P.O. Box 1105, Lima, Ohio 45802
Industrial surplus is mostly overruns and components not quite up to specs. Most of it will work in noncritical applications, but caveat emptor is the watchword. Look at the ads for names and addresses.

Other sources for parts: about the cheapest source for electronic parts is to get old gear and cannibalize it. Surplus houses sell computer boards which are good sources for digital ICs. Amateur radio conventions, hamventions, swap and shops and flea markets can yield some bargains.

IV. Since 1970 I have wondered, at least once in print, why **Catalog** and **Epilog** readers did not take advantage of this powerful communications tool. It is more personal than broadcast radio and cheaper than the telephone. The technical parts of the hobby are really not too difficult. Why not, then? Radiocommunication is no great mystery; it is not reserved for the rich, the established or the technically educated. In the **Last Catalog**, Stewart Brand comments, "The **Radio Amateur's Handbook** may be of interest to the communities and enclaves who've been fantasizing an underground radio net." Why underground? Why fantasize?

Wes Plouff WA8CBN
Port Huron, Mich.
March 29, 1974

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Mail-order Electronics Firms

Based mainly on the new IC (integrated circuit) silicon technology, these mail-order companies are about the only reliable source of ICs at reasonable prices in most parts of the country, because

1) The manufacturers will not sell small quantities. A thousand pieces is the usual minimum they seem to enjoy thinking about.
2) The distributor networks for the manufacturers are oriented towards high-budget labs and one-of-a-kind industrial applications. They feature high prices and very unreliable stocking—— the manufacturers are unkind even to them.

The mail-order firms get around these problems by tapping the large nationwide experimenter market. Thus they can get quantity discounts and fairly reliable delivery from the manufacturers, and still maintain a profit margin on small orders.

Specific Firms: (write for catalogs)

Poly Paks
P.O. Box 942
South Lynnfield Mass 01940
(617) 245-3829
The largest. Smorgasbord of good components with lots of junk mixed in. Somewhat disorganized. Some spec sheets on request—— remember to ask. Reasonably clear order form, except shipping charges explained very poorly. Stay away from untested or unmarked parts. "Factory seconds" are almost always useless (except for digital ICs with separate gates, some of which may be good).

Digi-Key Corporation
P.O. Box 126
Thief River Falls MN 56701
(218) 681-6674

Smaller selection than Poly Paks, but much better organized and usually cheaper. Excellent combination catalog and order form. No spec sheets.

Delta Electronics Co.
Box 1
Lynn, Mass. 01903
(617) 388-4705
Interesting catalog with some unusual items and a nice talky format—— for those who like reading catalogs. Strong on transformers and used circuit boards. I've never ordered from them, though.

Addenda: Spec sheets: Printed by the manufacturer, these describe the product and its use. They are essential to any work with semiconductors—— yet no good system exists for getting them out to individuals. Again, large customers have no problem here—— and the industry exists for them.
Radio Shack: Another source of semiconductors at only about triple the price you should pay. Fair variety, unreliable supply. Good for emergencies, with occasional bargains.

Ralph Dratman
San Anselmo, CA

New Directions Radio

My battlefield at this moment is putting the communication tool of amateur radio into the hands of people trying to change themselves and the world for the better. While the project is only about 7 months along, things are going very well—— due in large part to a column on Slow-Scan TV in **CQ**, a straight-world ham magazine for the past two years, and the scope of this column was recently broadened to include these activities.

Points of contact for current information are:

1. "New Directions Radio" column in **The Mother Earth News** ($8.00/year, Box 70, Hendersonville, NC 28739)
2. "Cop's Column" in **CQ** magazine ($6.00/year, 14 Vanderventer Ave., Port Washington, NY 11050)

3. Copthorne Macdonald, WØ ORX, P.O. Box 483, Rochester, MN 55901.

All good things,
Cop Macdonald

Australian Hams

Roger Harrison reports that "we have just recently produced a directory, covering Australia and New Zealand, for Electronics and Communications freaks, radio amateurs, short wave listeners, inventors, etc." Write to: 6 Up Magazine, 47 Bellast Point Rd., Birchgrove 2041 N.S.W. Australia.

Shortwave Listener's Handbook

The SW Listener's Handbook *is a must for all swl's and dx'ers. It provides up to date information about: SW history, tips, techniques, projects, receivers, QSL's, antennas, and many other valuable pieces of information. When the author said that it was complete, he wasn't kidding, IT IS COMPLETE!!!*

—John Ward

Shortwave Listener's Handbook
Norman Fallon
1972; 137pp.
$3.95 postpaid
from:
Hayden Book Co., Inc.
50 Essex St.
Rochelle Park, NJ 07662
or Whole Earth

A Philippine farmer plows his rice paddy while listening to world news on a transistor radio.

The shortwave broadcast bands are today in about the same spot the AM broadcast band was before the public took to AM radio. The next few years could spell a "shortwave broadcast breakthrough."

Such a breakthrough has already been kicked off by the transistor radio. The broadcasters have the necessary power—— all that remains is to alert the public to the enjoyment of SWL'ing.

World Radio & TV Handbook 1974

Definitive listing of world broadcasters complete with program schedule and musical interest signals. If you're stuck someplace where things are slow, a good receiver and this book will up the action.

—SB

World Radio & TV Handbook
J.M. Frost, ed.
1947. . . 1974; 408pp.
$7.50 postpaid
from:
World Radio-TV Handbook
Box 88
2650 Hvidovre
Denmark
Criller Associates, Inc.
Box 239
Park Ridge, NJ 05676

Handbook of Watch and Clock Repairs

Tools, techniques, theory, function, mysterious goings-on and tricks of the trade are explained in enough detail to get you started repairing and adjusting clocks and watches or other small mechanisms. Lots of illustrations and unusually clear text.

—JB

Handbook of Watch and Clock Repairs
H.G. Harris
1961, 1972; 176pp.
$5.95 postpaid

Advanced Watch and Clock Repair
H.G. Harris
1973; 272pp.
$6.95 postpaid

both from:
Emerson Books, Inc.
Reynolds Lane
Buchanan, NY 10511
or Whole Earth

Caldwell Industries, Box 170, Luling TX 78648 sells clock kits and many nice tools for making them, too.

Guide to Broadcasting Stations

Around the world some thousands of long and short-wave radio stations are sending. If you're receiving, this standard guide will tell you who's where. Cross-referenced by geographical and electronic (dial) location. Handy and cheap.

—SB

Guide to Broadcasting Stations
1946. . . 1973; 201pp.
$2.50 postpaid

from:
Butterworth & Co. Ltd.
London: 88 Kingsway
WC2B 6AB
England

De Covnick & Son Clock Kits

Looks like good prices on clock kits and parts.

—SB

H. De Covnick & Son
P.O. Box 68
Alamo, CA 94507

Catalog
$ .50

Weight Driven Time Only Movement
TM-750

A single weighted time only movement with an eight day weight drop. A singularly fine movement for precise time keeping. Can be used in long cased wall clocks or small floor clocks, such as the Heritage. Complete with hands, weight and shell, pendulum rod and bob. $29.50

BABA BLABLA BREAKS HIS SILENCE

"At eleven-thirty on *TV Ching* this evening," Chocolate Graham announces over the public address system, "Baba Blabla is going to speak for the first time in thirty years." Then she puts on a record of *New Speedway Boogie* by the Grateful Dead.

Please don't dominate the rap, Jack
If you got nothin' to say....

All day long there is speculation about what Baba Blabla's first words will be.

"Mama," suggests one devotee.

"Where's the dope?" guesses another.

Baba Blabla is preceded on *TV Ching* by a man who has disguised his appearance by wearing panty-hose over his face. The legs are draped around his shoulders like a nylon shawl.

"I'm a spiritual junkie," he confesses. "To support my habit, I travel around to different ashrams and steal all the shoes that've been left outside. Then I sell them to a fence who supplies a chain of Used Shoe stores. With the money I earn on each expedition, I'm able to find a new teacher to spend it on so that I can eventually understand how I fit perfectly into the grand scheme.

"Recently I went and got programmed for forty days at Aripoff Center in Chile where there were some U.S. Army colonels hanging around. Then I went and got deprogrammed for forty nights at Excedrin Institute in Big Sur where I recognized those same colonels hanging around, only now they were generals.

"Well, one night I was soaking in the hot spring sulphur baths and I overheard them discussing a scenario that gave me the chills. They were talking about a squad of their personnel from Special Forces who plan to claim that they're revolutionary terrorists and hold our whole government hostage with just a few home-made nuclear devices.

"I didn't want to get involved, but I just had to tell somebody. The information was bursting inside of me. And when I found out that Baba Blabla was holding listening sessions here at Camp Crap, I figured he would be the ideal one to unburden myself to. So I told him this morning, and you could see he was really startled.

"He wrote out a note saying, *Why don't you expose this?* And then— without the slightest premeditation— I did something I'd never done before. I challenged a guru. I said to him, 'Baba Blabla, I'll expose this on the day you break your silence.' Then he looked even more startled. He wrote, *Maybe*. Well, obviously, he later accepted my deal. So— without further ado, it gives me great pleasure to introduce him. And now— here's Baba!"

Wearing a bright orange jalaba, Baba Blabla enters and embraces the spiritual junkie, who quickly pulls up his pants but starts to remove the panty-hose from his head as he leaves.

The largest crowd ever to gather on the *TV Ching* field watches Baba Blabla take his place on the toilet. He milks the suspense for a couple of minutes, then opens his mouth and begins to whisper.

"Unaccustomed as I am to public speaking...."

Flashiebackie:

Little Ricky Blabla, who seems like an ordinary ten-year-old kid, is riding in a car with his parents. Sitting in the back seat, he decides to try out his first dirty joke on them.

"If it takes nine months for a baby to be born, how come you two were in such a hurry when you were making one last night?"

"What?" his mother shrieks, turning to her husband. "Where does he pick up filth like that?"

"Ricky, I don't wanna hear another word out of you," his father threatens through clenched teeth. "Do you hear me?"

No answer. Ricky Blabla is taking his father literally.

"I said I don't wanna hear another word out of you," his father repeats, turning around and raising his right hand as if in the middle of playing four-wall handball. "Do you hear me?"

Ricky Blabla remains silent. His father smashes at him with the heel of his hand, but Ricky ducks. His father loses control of the car, it crashes and Ricky becomes an accidental orphan.

Not another word is heard out of him....

"I simply lost the desire to talk," Baba Blabla is saying. "There was nothing physiologically wrong. Relatives had me examined by child psychiatrists who were convinced I was exhibiting— according to their diagnosis— hysteric manifestations of oral necrophilia. Naturally I considered speaking again, but I didn't want to be pressured into it.

"Then I grew accustomed to being silent. Matter of fact, I preferred it. Most people, in order to look you in the eyes, have to say something. That's the only time they look you in the eyes. You can't just stare at another person. It's considered rude. And I discovered that adults would share the most bizarre confidences with me. Through their perception I had become a human pet, who understood but never judged.

"Then, as I got older, they began to give me credit for releasing their inhibitions. My reputation spread. Visitors even came to see me from other countries. And all I had to do was listen, as if I were holding auditions for a theater of private pilgrimages.

"Of course I became entrenched in my role because it was a full-time part. I didn't go into the closet when I was alone and make small talk with myself. So there I was, a blossoming intercontinental celebrity, with no idea of what I would've become had fate not cast this gimmick my way.

"I had the advantage of not dissipating energy trying to select conversation that would imprint me favorably onto the consciousness of others. Conversely, it was a tremendous learning arena. I began to view the world in terms of a psychic chess game between the forces of control and service. Until today. The spiritual junkie called my bluff. I had to ask myself, Am I stuck in the desire to remain silent?

"I wandered all around Camp Crap. I watched some fellow with a tongue that's over a foot long playing with children. He used his tongue as a jump-rope for one youngster. He let another child actually chin on it. He entertained a group of mothers nursing their infants by getting inside a basket and letting them be snake-charmers, with his tongue as the snake while one of them played his kazoo.

"Somehow, it was his behavior that made me realize that the contest between control and service is sustained within each individual. My silence was not neutral. Rather, is was aligning me on the side of control. I immediately sought out that spiritual junkie and changed my Maybe to Yes. We are what we pretend to be...."

Baba Blabla is followed on *TV Ching* by Virginia Real from the Nude Exorcist Parlor.

"The law," she begins, "is nine-tenths of possession."

[Continued, page 719]

People's Computer Company

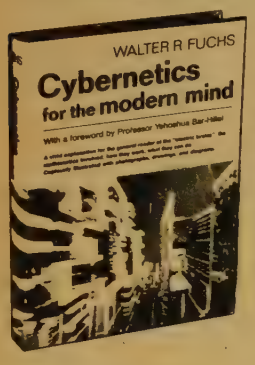
This page was assembled by PCC. See their excellent newsletter, Pg. 724. For a depiction of the computer life, see Two Cybernetic Frontiers, *Pg.* 455.

–SB

Cybernetics for the Modern Mind

Finally an excellent general introduction to computer science. Here are the principles by which information flows in our Western world these days. For creativity or self-protection we'd best comprehend them.

–SB



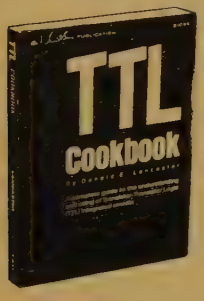
Cybernetics for the Modern Mind
Walter R. Fuchs
1968, 1971;357pp.
$6.95 postpaid
from:
Macmillan Pub. Co., Inc.
Order Dept.
Front and Brown Sts.
Riverside, NJ 08075
or Whole Earth

Two water taps A and B in parallel, only prevent an indicator wheel (on right) from turning when they are both closed (bottom). In order to make water flow only one of the taps needs to be opened. This connection is known as an 'Or-connection'.

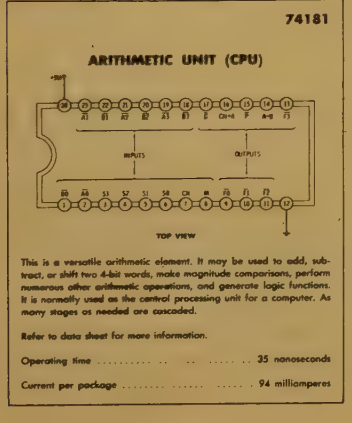
TTL Cookbook

"TTL" means transistor-transistor logic–– the new integrated circuit raw material for cheap homebuilt logic machines. The book assumes you know basic electronics and takes you the rest of the way from there–– it's a major breakthrough for the tinkerer.

–SB



TTL Cookbook
Donald E. Lancaster
1974; 335pp.
$8.95 postpaid
from:
Howard W. Sams & Co., Inc.
4300 W. 62nd St.
Indianapolis, IN 46268
or Whole Earth


74181

ARITHMETIC UNIT (CPU)

TOP VIEW

This is a versatile arithmetic element. It may be used to add, subtract, or shift two 4-bit words, make magnitude comparisons, perform numerous other arithmetic operations, and generate logic functions. It is normally used as the central processing unit for a computer. As many stages as needed are cascaded.

Refer to data sheet for more information.

Operating time ..... 35 nanoseconds

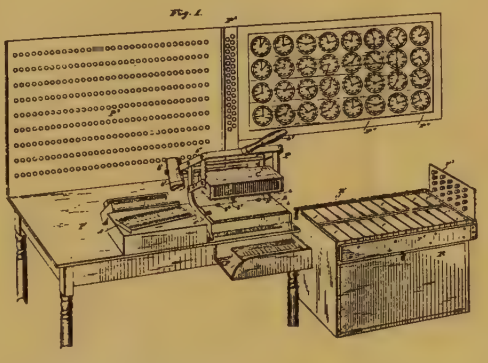
Current per package ..... 94 milliamperes

A Computer Perspective

An Eames exhibit on the development of the computer rendered into book form. Finely wrought. This brief field has an instantly long and rich history.

–SB

A Computer Perspective
By the office of Charles & Ray Eames
1973; 174pp.
$15.00 postpaid
from:
Harvard University Press
79 Garden St.
Cambridge, MA 02138
or Whole Earth



Patent for Hollerith electric tabulating machine. Following a suggestion made by Dr. John Shaw Billings, the medical statistician, Hollerith applied to statistics the punch card information principle of the Jacquard loom.

•

Utopias now appear much more realizable than one used to think. We are now faced with a very different new worry: How to prevent their realization?

–Nicolas Berdiaeff

Cybernetics of Cybernetics

The field of conceptual cybernetics is a howling wilderness just now, inviting a tough breed of brainy hunters-and-gatherers into its mysteries. This creamy selection of papers and motley tangle of ideas mustered by Heinz Von Foerster and his students at the University of Illinois is both treasure map and thick dark woods. Labyrinths of self-reference and meta-self-reference; babels of technical terminology basically alchemical; a new gnosticism. Watch out.

–SB

[Until the editors find a publisher, inquire to "Cybernetics of Cybernetics" 216 E.E.R.L., University of Illinois, Urbana IL 61801.]

Q What is Cybernetics?

A I would like to call Cybernetics an offer.

Q What does Cybernetics offer?

A Cybernetics offers access to and interaction with complex systems in order that they may appear simple; to and with apparently simple systems in order that their complexity may be revealed.

Resource One Newsletter

Resource One is a dozen people confronted with complete control and total responsibility for fifty feet of grey boxes called an XDS-940 time-sharing computer. The milieu is anti-profit and directed towards social change with decisions made by consensus at weekly staff meetings. The basic tensions of the situation center around the problems of a politically diverse, self-managed working group with heavy commitments and considerable resources, and they center at the fundamental tension between person and machine.

Resource One
yours for contribution
from:
1380 Howard St.
San Francisco, CA 94103

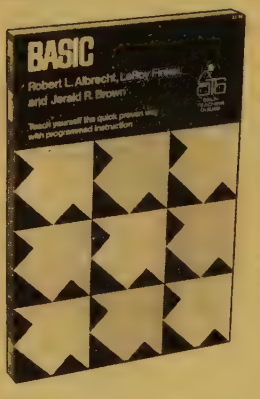
Basic

For too long have computers been the center of a mystique and nowhere has this been more evident than in the languages with strange names, ALGOL, COBOL, FORTRAN which frighten off those whose interest is not sufficient to sustain them through months of study, page after miserable page of boring and incomprehensible jargon and math. Basic *was developed so that "people" could use computers easily. So useful has it proved, that it can be said that before* Basic, *computers were for math majors and after* Basic *computers were fun.*

Computers which run in Basic *are small, cheap and beginning to be produced by the tens of thousands. Shared time is likewise cheap in most metropolitan areas. This self teaching book is for fun too –– but is no lightweight, for few college courses cover more in two semesters, and long before the book is finished the reader is quite able to confidently use the computer as a tool–– or a toy. Even if there is no immediate access to a computer (it is not needed to learn from the book) by the end of the book the principles of programming are thoroughly understood and the principles are equally applicable to any computer or language which may be later studied.*

Critics complain that there is little that Basic *does that cannot be done better by other high level languages–– and this is true, but it is equally valid to reply that there is little that the same languages do that* Basic *cannot do nearly as well–– but with one fourth the cost and one tenth the effort!*

–Keith Britton



Basic
Robert L. Albrecht, LeRoy Finkel, Jerald R. Brown
1973; 325pp.
$3.95 postpaid
from:
John Wiley & Sons, Inc.
One Wiley Drive
Somerset, NJ 08873
Western Dist. Center
1530 S. Redwood Rd.
Salt Lake City, UT 84104
or Whole Earth

20. Here is one version of a population growth program.

```
100 REMARK PROGRAM TO CALCULATE POPULATION GROWTH
110 PRINT "INITIAL POPULATION";
120 INPUT P
130 PRINT "RATE OF GROWTH";
140 INPUT R
150 PRINT "NUMBER OF YEARS";
160 INPUT N
170 LET Q=P*(1+R/100)↑N
180 PRINT
190 PRINT "POPULATION AFTER";N;"YEARS IS";Q
999 END

RUN

INITIAL POPULATION?1000
RATE OF GROWTH?1
NUMBER OF YEARS?20

POPULATION AFTER 20 YEARS IS 1220.19
```

We'll call it 1220 people

Fundamental Algorithms

Fundamental Algorithms *is the definitive text on computer programming techniques. Since its publication in 1968, few computer bibliographies and reference lists have failed to mention it. This is understandable, as it stands unchallenged in its thorough and authoritative treatment of a simple, important subject previously rarely approached, let alone in such an entertaining and engaging style: the organization and management of the fundamental data structures of (all) programming; and the mathematical methods useful for the analysis of program behavior.*

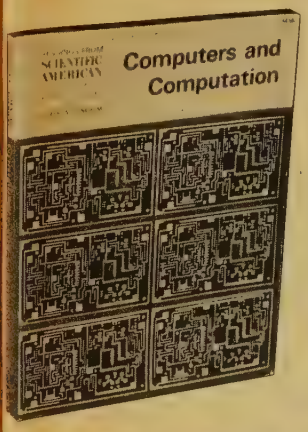
This book is invaluable to computer specialists of all kinds. It is a marvelous textbook as well as an indispensable reference. But even people whose use of computers is incidental to their work will find this text very informative. It not only provides a better understanding of computer programs, but the understanding needed to better your programs.

Knuth's style is informal and informative. The reader quickly affirms that the book is indeed filled with "facts rather than vague, general commentary." Part of the delight in reading **Fundamental Algorithms** *is in witnessing the superb quantification of simple programming principles you thought you knew. There are hundreds of excellent exercises, rated (by the author) from trivial to "research problem," most of which are solved in the last 140 pages. Interesting historical sections and a complete (and usable!) index round out this fine production which is remarkably free of typographical, graphical and contextual errors. [With the publication of the Second Edition, Knuth has raised the bounty for first-discovery of an error from $1 to $2. (You won't get rich that way.)]*

Computers and Computation

These 26 articles from Scientific American *add up to an ideal introduction to computers, how they came about and how to use them.*

–SB
[Suggested by Bob Albrecht]



Computers and Computation
Introductions by Robert R. Fenichel and Joseph Weizenbaum
1971; 283pp.
$4.95 postpaid
from:
W.H. Freeman and Co.
660 Market St.
San Francisco, CA 94104

Head-mounted display at the University of Utah employs a display processor similar to that used for the aircraft carrier sequence. Two miniature cathode ray tubes are built into the goggles. A mechanical linkage tells the computer where the viewer is looking at each instant. The display processor instantaneously supplies the correct image for each head position. The viewer is free to look anywhere in a 360-degree circle and can look up and down through an angle of about 45 degrees. Two samples of what he sees are shown at the right. The objects grow larger or smaller and move with relation to one another as the observer moves around.

Each chapter alone would be a credit to any author. Together they could form a "magnum opus." But for Knuth it's but Volume I of a proposed seven volume series! Volumes II (Seminumerical Methods) and III (Sorting and Searching) have already been published. And like Volume I, they have quickly become the authoritative references on their respective, more specialized subjects.

–Larry Birenbaum

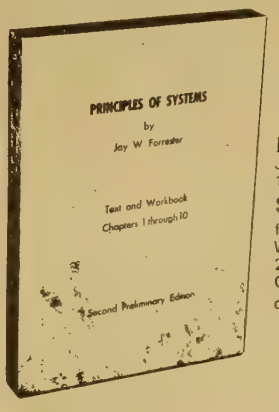
Fundamental Algorithms
Donald E. Knuth
1968; 634pp.
$19.50 postpaid
from:
Addison-Wesley Pub. Co., Inc.
Reading, MA 01867
or Whole Earth

Let us try to compare the concept of an algorithm with that of a cookbook recipe: A recipe presumably has the qualities of finiteness (although it is said that a watched pot never boils), input (eggs, flour, etc.) and output (TV dinner, etc.) but notoriously lacks definiteness. There are frequent cases in which the definiteness is missing, e.g., "Add a dash of salt." A "dash" is defined as "less than 1/8 teaspoon"; salt is perhaps well enough defined; but where should the salt be added (on top, side, etc.)? Instructions like "toss lightly until mixture is crumbly," "warm cognac in small saucepan," etc., are quite adequate as explanations to a trained cook, perhaps, but an algorithm must be specified to such a degree that even a computer can follow the directions. Still, a computer programmer can learn much by studying a good recipe book. (In fact, the author has barely resisted the temptation to name the present volume "The Programmer's Cookbook." Perhaps someday he will attempt a book called "Algorithms for the Kitchen.")

Principles of Systems

Personally I prefer strictly conceptual cybernetics, where you hear loose language such as "An increasing number of old maids gives rise to more domestic cats, which decrease the number of rats, which lowers the incidence of bubonic plague by some amount." Forrester can teach you to use numbers around those verbs and get some use out of a computer–– as he did with the admirable book Limits to Growth. *(Pg. 464) Student workbook included with text.*

–SB



Principles of Systems
Jay W. Forrester
1968
$8.00 postpaid
from:
Wright-Allen Press, Inc.
238 Main St.
Cambridge, MA 02142
or Whole Earth

Principles of Interactive Computer Graphics

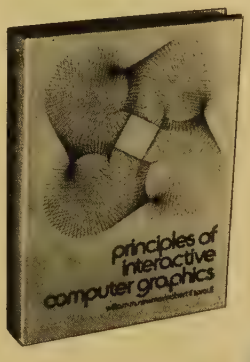
Here it is. . . the first book that tells you most of what you need to know to get started in computer graphics. Before you dig into this book, though, you need to know something about trigonometry, coordinate geometry and matrix algebra plus a modest understanding of both high-level and assembly language programming.

The book consists of 5 parts plus a giant bibliography (319 references) and a bunch of appendices.

- *Hardware for displaying computer graphics. . . how to dsiplay points and vectors on a CRT. . . an instruction set for programming simple pictures.*
- *Ways to generate codes to make pictures. . . match for making 2-dimensional transformations on pictures. . . translation, rotation, shrinking, expanding, distorting images.*
- *Devices for pointing at, positioning, adding, deleting images on the CRT. . . the light pen, the joystick, the mouse. . . tablets for entering graphical stuff. . .*
- *Displaying 3D images on a 2D screen. . . perspective. . . mathematical transformations. . . hidden line and hidden surface problems. . . shading.*
- *Languages for doing computer graphics. . . features of languages, design of languages, need for high-level graphics languages. . . survey of high-level languages for computer graphics–– ALGOL 60, PL1, FORTRAN, DIAL, SAIL, ELAP, EULER and others. . . components of a complete graphics system.*

Plus appendices on things like vectors and matrices, homogeneous coordinate techniques, instructions for a small computer, the SAIL language, hidden line algorithms and choosing a display system.

–Bob Albrecht



Principles of Interactive Computer Graphics
William Newman and Robert Sproull, Richard F. Dojny, Ed.
1973; 607pp.
$17.50 postpaid
from:
McGraw Hill, Inc.
Princeton Road
Hightstown, NJ 08502
Manchester Rd.
Manchester, MO 63011
8171 Redwood Highway
Novato, CA 94947

Design of Man-Computer Dialogues

This book gives a very thorough overview of the kinds of human-computer interactive systems and languages available. The table of contents shows that the book (which is mostly examples of such systems/languages, with a moderate amount of philosophy and psychology added) is divided and subdivided well, so you shouldn't have any trouble finding your area of specialty and digging right in. The references seem to be for those systems used as examples.

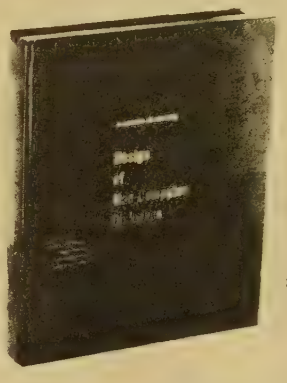
Martin writes for the industry audience, in particular the people who're deciding what type of computer storage and retrieval system to build/buy.

There's not a large amount of detail on how such systems are built. It's mostly the outlines and general considerations that are given.

I came across a few sections that I thought were fun, like:

- *an excellent introduction to APL (an unusual and fascinating computer language)*
- *at least two conversations with ELIZA, the computer program that impersonates a rogerian psychoanalyst*
- *several excellent chapters on what to remember while you're designing your own system*
- *a fictitious cable TV hookup that connects you to a travel agency's computer where, for free, you can preview likely (or just plain flight-of-fancy) vacation spots.*

–Dave Kaufman
[Suggested by Bob Albrecht]



Design of Man-Computer Dialogues
James Martin
1973; 559pp.
$15.95 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ 07632
Box 18501
Salt Lake City, UT 84118
or Whole Earth

The ease with which the patients accepted the computer's questioning surprised the investigating team. There were few, if any, signs of anxiety or uncertainty. Questioned about the experience afterwards, none of the patients said that he found it unpleasant or annoying. Many compared the computer favorably to the live consultant, describing it as "polite," "friendly," and "understandable." In one similar application, designed to establish a personality profile of the patient, it was even difficult to persuade old ladies to leave the terminal; nobody had taken *that* much interest in them in years!

Computerworld

How do you keep up with computer science? Read Computerworld *weekly. New products, new applications, new companies, mergers, failures. The* Wall Street Journal *of the computer industry. Standard newspaper mosaic format and reporting, with columnists, editorial page, in-depth serialized features, and articles of general interest.*

Computers and People

This periodical is the closest thing to being the Scientific American *of the computer-oriented press. Apparently well researched articles on broad spectrum of topics: Technical (hardware and software), social, educational, political. It's a magazine with a conscience.* Computers & People *(formerly titled* Computers and Automation*) is heavy on social comment and humanistic uses of computers. Every August issue focuses on Computer Art and every March issue on Computer in Education.*

–Jerry Brown
[Suggested by Bob Albrecht]

Computerworld
$12/year,
published weekly
from:
Computerworld
Circulation Dept.
797 Washington St.
Newton, MA 02160

Computers and People
Edmund C. Berkeley, ed.
from:
Berkeley Enterprises, Inc.
815 Washington St.
Newtonville, MA 02161

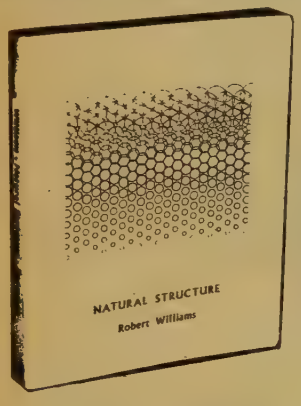
One year (excluding the Computer Directory and Buyers Guide) 12 issues, U.S. only: $11.50 (monthly)
One year (including the Computer Directory and Buyers Guide) 13 issues, U.S. only: $23.50

Natural Structure

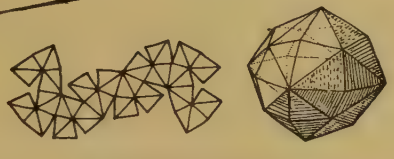
After reading Ken Kern's **Owner Built Home** *I began to wonder why no one had written a good book on geometry and form which would liberate our imaginations when we build shelter. Last year a friend turned me on to* **Natural Structure: Toward a Form Language.** *It is the finest, most complete book on the subject I have found. The author has done what Fuller long promised but never did. He made a useful design tool from scattered information on geometry and natural structures. The book gives a complete picture of form from start to finish.*

Once the central concept of the book is stated it seems simple and beautiful. It should have been self evident. Geometric forms make up a "language" which is spoken, in a sense, by those of us who make buildings. We have to know the "form language" before we can understand what we are doing when we build. The book has a first chapter containing a discussion of the idea of the "form language". The chapters that follow contain all of the information necessary to understand the ways to organize two and three dimensional spaces from circle packings and tessellations of polygons, to polyhedra and how they pack. Then there is a complete discussion of every kind of sphere packing and how they relate to the polyhedra. All of these geometries are derived from natural structures like crystals and soap bubbles. There is enough information to go into the minutest detail. If this isn't enough, the last chapter shows the methods for creating countless more forms. There are even examples of a few buildings and how these methods were used to make them. The author is interested in design, but the book doesn't push any particular forms down our throats. It just presents possibilities for expanded thinking and leaves all of the decisions about building to us. It is a book to live with and grow with.

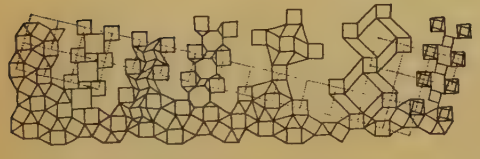
—Donna Cheney



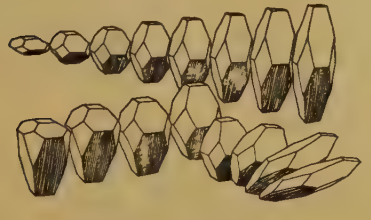
Natural Structure
Robert Williams
1971; 263pp.
$6.50 postpaid
from:
Eudaemon Press
Box 236
Moorpark, CA 93021
or Whole Earth



Hexakis Octahedron V4.6.8



The $3^2.4.3.4$ tessellation with augmented or deleted edges and vertices to generate new tessellations.



Examples of simple distortions of 4.6^2.

Cream Rises

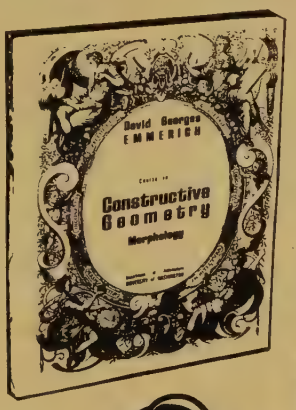
MATH

Regular Polytypes *Classic Coxeter* 320
World of Mathematics *The literature* 319
Mathematics—a Human Endeavor *Best intro* 392
Hewlett-Packard *Best pocket calculators* 707
Number Words and Number Symbols *Notation history* 320
How To Solve It *Logical heuristics* 392
Game Theory *Good intro* 706
Cuisinaire Rods *Kid math* 370
Fundamental Algorithms *Computer masterpiece* 705

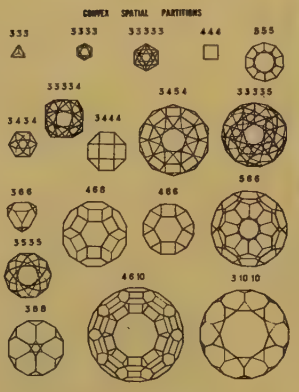
Constructive Geometry

A book aimed at giving the architect-to-be a feeling of manipulating form and space. Emmerich wants to bring geometry back into architecture, especially as he felt (in 1967) that the new building materials made possible new shapes, and that knowledge of geometry, topology, graph theory, crystallography and the most current scientific information were design prerequisites. Lots of good graphics

—LK
[Suggested by Steve Baer]



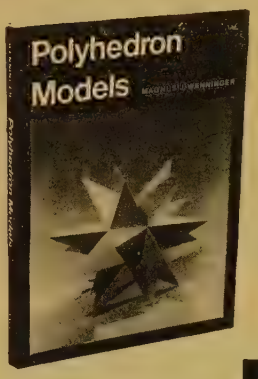
Constructive Geometry
David
Georges Emmerich
$5.50 postpaid
from:
Department of Architecture
University of Washington
Seattle, WA 98105



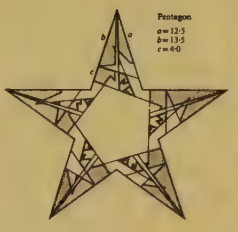
Polyhedron Models

How to make cardboard models of a variety of polyhedra, ranging in complexity from a tetrahedron to a great inverted retrosnub icosidodecahedron. Models are good to make because you learn the geometry, and they're nice to hang from strings. Photos of 119 models, sequential instructions, a good book for math teachers and their students.

—LK
[Suggested by Bob Easton]



Polyhedron Models
Magnus J. Wenninger
1971, 1974; 208pp.
$4.95 postpaid
from:
Cambridge University Press
510 North Ave.
New York, NY 10022
or Whole Earth



$$|2\ \tfrac{2}{3}\ \tfrac{4}{5}$$
$$(20+60)\{3\}+12\{\tfrac{4}{3}\}$$
1·16000 30093

Great inverted retrosnub icosidodecahedron

This polyhedron is truly remarkable in its complexity. Deep pentahedral cups display deeply recessed decagrammic rosettes which close off their tapered central portions. These cups have steep outside facial planes that are fantastically intricate. The vertex figure shows how two triangle faces meet just beyond the central portion of a star arm. This introduces very slender spiked wedges whose vertices coincide with the vertices of the pentagrams and which then continue down toward the central portions of the pentagram faces but are cut into two more segments before disappearing into the interior of the solid. You will see this better from the model once you start making it than from any description of it in words. So if you want to attempt this one, here is an assembly technique.

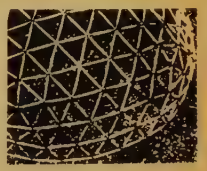
Heliwire Connectors

Some of the math model kits now on the market are enough to scare any kid away from geometry forever. Lumpy vertexes. Here, luckily, is an inexpensive, elegant one: the Heliwire connector kit invented by John Fieldhouse. You can buy kits, or just the connector wire itself with instructions for making other types of connectors.

—LK

Archimedean solids, regular and semi-regular as 3D nets: $3.00
Geodesic dome 250 mm diameter (3v icosa, 5/8 sphere): $3.00
Geodesic dome 500 mm diameter (6v icosa, hemisphere) $7.00

Sea mail: 30 cents per kit. Air mail, write for details.
from:
John Fieldhouse
50 Swithland Lane
Rothley, Leics. LE7 &SE
England



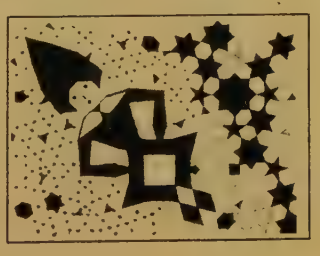
The connectors are broken from a prepared helix of coated mild steel wire. Several loops, usually three, fit together inside a tube to make each arm of the hub. The spring of the loops and the resistance of the tube wall hold the structure firmly together. Tubes and connectors can be altered and used repeatedly and no tools are required.

Heliwire is very suitable for both molecular and geodesic structures since any angular situation can be represented.

Altair Design

I've come across a book that will probably be as popular with your readers as it is in our house. It is **altair design** *and it is a very stimulating book of creative designs by Ensor Holiday. The book contains six basic designs with variations on two of them. The purpose of the book is to "guide the imagination through a maze of lines and to enable people to shape on paper the images stirred in their minds". All you need is a set of pencils, crayons or pens. The designs are conveniently perforated for easy removal from the book.*

—J. V. McShirley



Altair Design
Ensor Holiday
1970; 60pp.
$1.95 postpaid
from:
Pantheon Books
457 Hahn Rd.
Westminster, MD
21157

Game Theory

An admirable introduction to the elements and uses (and limitations) of game theory. The paradox of "Prisoner's Dilemma" is nicely presented, and Anatol Rappaport's "solution" nicely doubted.

—SB

The Prisoner's Dilemma

Two men suspected of committing a crime together are arrested and placed in separate cells by the police. Each suspect may either confess or remain silent, and each one knows the possible consequences of his action. These are: (1) If one suspect confesses and his partner does not, the one who confessed turns state's evidence and goes free and the other one goes to jail for twenty years. (2) If both suspects confess, they both go to jail for five years. (3) If both suspects remain silent, they both go to jail for a year for carrying concealed weapons—— a lesser charge. We will suppose that there is no "honor among thieves" and each suspect's sole concern is his own self-interest. Under these conditions, what should the criminals do? The game is shown in Figure 29. This is the celebrated prisoner's dilemma which was originally formulated by A.W. Tucker and which has become one of the classical problems in the short history of game theory.

		Suspect 2: Confess	Suspect 2: Do Not Confess
Suspect 1	Confess	(5 yrs, 5 yrs.)	(go free, 20 yrs.)
	Do Not Confess	(20 yrs., go free)	(1 yr., 1 yr.)

Let us look at the prisoner's dilemma from the point of view of one of the suspects. Since he must make his decision without knowing what his partner will do, he must consider each of his partner's alternatives and anticipate the effect of each of them on himself.

Game Theory
(A Nontechnical Introduction)
Morton D. Davis
1970; 210pp.
$2.95 postpaid
from:
Basic Books, Inc.
Harper & Row
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Suppose his partner confesses; our man must either remain silent and go to jail for twenty years, or confess and go to jail for five. Or, if his partner remains silent, he can serve a year by being silent also, or win his freedom by confessing. Seemingly, in either case, he is *better off confessing!* What, then, is the problem?

The paradox lies in this. Two naive prisoners, too ignorant to follow this compelling argument, are both silent and go to prison for only a year. Two sophisticated prisoners, primed with the very best game-theory advice, confess and are given five years in prison in which to contemplate their cleverness.

•

It is when the "prisoner's dilemma" is played repeatedly—— and not for a fixed number of trials but for an indefinite period—— that the cooperative strategy comes into its own. And these are precisely the conditions under which the "prisoner's dilemma" is often played. Two competing firms know that they won't be in business forever, but they generally have no way of knowing when death, merger, bankruptcy, or some other force will end their competition. Thus, the players can't analyze what will happen in the last "play" and then work backward from there, for nobody knows when the last "play" will be. The compelling argument in favor of the uncooperative strategy breaks down, then, and we breathe a sigh of relief.

POCKET CALCULATORS (FOUR-FUNCTION)

by Andrew Fluegelman

The recent electric pocket calculator phenomenon isn't just another consumer lure. These machines offer significant savings in time and accuracy, possibly even energy; they're good tools. (We found this out dramatically as we were trying to settle on a distributor, printer and cover price for the **Epilog,** *and had to work through a maze of inter-related and shifting parameters. It wouldn't have been manageable without the Texas Instrument Datamath TI 2500 a friend lent us.) So we decided to look for the "best deal" in a four-function calculator.*

Our most significant discovery was that the industry and the marketplace for personal calculators is currently in a state of great turbulence: companies over-producing, under-pricing, going out of business; wholesalers and retailers buying up discontinued models in bulk; prices shifting wildly (generally downward). It will all most likely settle down within the next few years, but until it does, the best deal is to be found not among the several calculators which have managed to establish themselves (like the Datamath), but among the victims of the exploding technology. What follows should help you in the selection process.

Since you can reasonably safely assume that any calculator you buy will give the correct answer to the problem punched in, what you should be looking for is the "right" combination of capabilities. Here's what we believe are the minimum features required for a useful tool:

* *8-digit display—— Standard for most calculators. This will let you calculate up to* **$999,999.99.** *Just about all the significant places needed for most problems.*
* *full floating decimal—— Lets you punch in "7", "11.3," and ".00001" and get "18.30001" as the total.*
* *algebraic logic (vs. "arithmetic logic" found in the cheapest models)—— Lets you punch in the problem the way you would "say" it. To test for this, you should be able to subtract* **3** *from* **5** *by pushing buttons marked, respectively, "5", "—", "3" and "=" and get your answer.*
* *chain and mixed calculations—— Lets you perform a series of calculations in different functions without intermediate totals. For example, you can punch in "2", "x", "3", "+", "4", "÷", "2", "—", "1", "=" and get "4".*
* *constant mode—— Lets you multiply or divide by a constant without having to key it in each time. (A few calculators permit constant calculations for addition and subtraction, too—— most don't.)*
* *clear entry key—— Lets you clear the last entry punched in without clearing the calculations preceding it. (On some calculators, there is only one "clear" key; pushing it once clears the last entry and pushing it a second time clears all previous calculations.)*

In addition to these basic features, there are two more found on many calculators which greatly expand their usefulness:

* *memory—— This is, in essence, a built-in scratch pad. It lets you enter the answer into a separate circuit, to which can be added or subtracted the answers from subsequent calculations. The total of the "memory" can later be re-introduced into a still subsequent calculation on the main curcuit. This capability turns out to be very handy.*
* *overflow indication/retrieval—— Many calculators will signal to you that your answer has exceeded the digit display capacity of the calculator, and will display only the most significant digits. Some permit you to successively divide this answer by* **10** *until the decimal point appears, thus enabling you to figure out the magnitude of the answer.*

The most sophisticated form of overflow retrieval lets you flip a switch and see the "lost" digits. (There is also "underflow" indication and retrieval—— a less commonly found feature.)

What we're describing here is the basic "four-function" (addition, subtraction, multiplication, division) model. You can also get calculators which automatically deal with and compute powers and roots, reciprocals, logarithmic and trigonometric functions, imaginary numbers, pi, and display the answer in exponential form. Also ones which compute simple and compound interest, yields of bonds and annuities, mortgage rates and trend lines. Don't bother with these "scientific" and "business" calculators unless you have a specific need for the specialized functions. If you do, consider carefully which mix of them will be most useful to you—— and plan on spending several hundred dollars.

With regard to power source, it is important that the calculator be able to run on AC current. Despite the fact that one of the appeals of these machines is their portability, you'll probably find that the majority of your "heavy" calculating will be at a desk where plug-in power is available. The portable power sources for calculators are either rechargeable nickel-cadmium batteries (built-in) or separate replaceable batteries. Don't automatically assume that the rechargeable are the best bet. Once they've run down, they require several hours to recharge. They also make the calculator more expensive, (albeit more economical in the long run if frequently used as a portable). Think about how your calculator's primarily going to be used, then consider alternative costs, battery life expectancies.

Finally, consider the calculators "feel". Are the buttons in logical positions? On some models, the buttons make a detectable "click" when they register, and this seems to aid in accurately entering digits. Another consideration is the size and legibility of the display. (Some people, generally males, are color-blind to the red displays found on many models.)

You're now ready to start shopping for your "best deal". Go to the most handy store and play with some of the "name" brands: Texas, Bomar, Sharp, Commodore. (And check out one of the Hewlett-Packards just to convince yourself that all those extra functions are probably completely useless to you, and only clutter the keyboard.) Then start looking for special sales, close-outs, etc. that offer significant savings over the name models, but keep in mind the essential features listed above.

We wouldn't recommend buying a close-out through the mail. Many retailers handling close-outs will offer a relatively short-term replacement warranty, but not one covering long-term repairs. Don't be too concerned by this. The point we're trying to make is that the calculator you buy this year isn't a life-time investment. Be satisfied with a serviceable cheap one that will see you through until the technology and the marketplace are refined and stabilized. We're just a few years away from programable pocket computers.

(After looking around for a month or so, we finally came across a close-out of an admittedly chintzy-looking calculator that nevertheless performs all the functions listed above (rechargeable batteries)—— for $39.95. Comparable name-brand models were selling at the time for about $100. Expect the prices of even the name brand models to have dropped by the time you're reading this.)

Chintzy close-out: $39.95

HP-65: $795.00

SCIENTIFIC CALCULATORS

In 1972, Hewlett-Packard Corporation introduced the HP-35 and virtually inaugurated an industry. They now have four models of (expensive) advanced pocket calculators, which set the standards against which lesser-priced competitors are measured:

* The HP-35 has a four-resigter operational stack (see below) and a separate storage register; is pre-programmed for the four arithmetic functions, the three trigonometric functions and their arcs (in decimal degrees), common logarithms and natural logs and anti-logs, reciprocals, square root, any power of a number and pi. It currently sells for $225 (the price having been driven down by the introduction of HP's subsequent models).
* The HP-45 augments the -35 with nine addressable storage registers and a separate "last-in" register; performs the trig functions in degrees, radians or grads and can convert the answers to degree/minute/seconds; adds to the -35's pre-programmed functions natural anti-logs, rectangular/polar coordinate conversions, vector arithmetic, statistical mean, standard deviation, sum-of-the-squares, factorial, percent and delta percent, and metric conversion constants. Current price: $325.
* The HP-65 contains a 100-step program memory, 51 pre-programmed functions, and a magnetic card reader /writer which permits pre-recorded programs (available from HP) to be inserted into the calculator and keyboard-originated programs to be recorded, edited and re-used. HP heralds it as the first personal, programmable computer. Price: $795.
* The HP-80 is a financial calculator with 36 functions, including bond yield and price, compound interest, mortgage payment, rate of return, trend lines, accrued interest, discounted notes, annual yield, annual percentage rate, mean and standard deviation, and a 200-year calendar. $395.

All of the HP's have a 200-decade range (10^{-99} to 10^{99}), expressable in up to 10 significant digits. The HP's also employ "Reverse Polish Notation". Basically, this means that there's no "=" key. Numbers are "entered" into an operational stack; operations are then performed on the numbers in the stack. The answer from an operation is automatically loaded into the stack. (To add 3+4 you would key in "3", "ENTER", "4", "+", whereupon the answer "7" would appear. To then multiply this sum by the sum of 5+6 you would next key in "5", "ENTER", "6", "+"—— obtaining the second sum, and finally "x"—— obtaining the product of the two sums.) For relatively straightforward calculations, a calculator employing algebraic logic and a memory is decidedly simpler to use; however, the superiority of calculators with RPN logic becomes evident in long calculations which contain multiple parenthetical expressions.

You can expect the prices of these advanced calculators to drop as new models are introduced and the competition increases. There are presently a large number of calculators which contain less exhaustive arrays of scientific functions and which sell for $100-$150. Your first step in choosing a scientific calculator should be sitting down and figuring out what types of problems you're going to be using it for. Then pay for only what you can use.

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Cream Rises
ECONOMICS

Toward a Steady State Economy *The next economics* 465
Economics *Standard text* 339
Input-Output Economics *Fruitful analysis* 708

Stone Age Economics

This brilliant collection of essays by a professor of anthropology and former student of Levy-Strauss's is the foundation of an "anthropological economics. . . in opposition to business-like interpretations of primitive economies and societies. . . which must consider primitive economies as undeveloped versions of our own. Economy is treated as a category of culture rather than behavior, in a class with politics or religion: not the need-serving activities of individuals but the material life process of society." In a great essay called **The Original Affluent Society** *Sahlins finds that among hunting and gathering societies, possessions, our great measure of affluence and success, are only a hindrance to people that must be constantly on the move, following the food. "The ultimate value," he says, quoting Lloyd Warner, "is freedom of movement." In so-called primitive societies goods are exchanged to underwrite or initiate social relations. In this essay* **The Spirit of the Gift** *Sahlins shows giving to be the primary political act. Inevitably the chief of a community is the giver of the most gifts and the tosser of the biggest parties, thus everyone is in his debt and he is at the same time the most powerful and the poorest member of the community. The most ambitious humans work the hardest so that they can give the most away. "Gifts make slaves," the Eskimoes say, "as whips make dogs." This book deals with the nature of exchange, with the ways a stable society operates in order to maintain fertility and abundance over long periods of time, and the way people live (literally the energy they use) when they are not harnessed to a culture like ours which has erected a shrine to the Unattainable: Infinite Needs. This book will give you some clues. It has changed my life.*

—Lewis MacAdams, Jr.

Stone Age Economics
Marshall Sahlins
1972; 345pp.
$12.50 postpaid
from:
Aldine Publishing Co.
529 S. Wabash
Chicago, IL 60605
or Whole Earth

The advantages of food storage should be considered against the diminishing returns to collection within the compass of a confined locale. An uncontrollable tendency to lower the local carrying capacity is for hunters *au fond des choses*: a basic condition of their production and main cause of their movement. The potential drawback of storage is exactly that it engages the contradiction between wealth and mobility. It would anchor the camp to an area soon depleted of natural food supplies. Thus immobilized by their accumulated stocks, the people may suffer by comparison with a little hunting and gathering elsewhere, where nature has, so to speak, done considerable storage of her own—— of foods possibly more desirable in diversity as well as amount than men can put by.

•

Whatever the resemblances in ideology of "ownership" the two systems of property work differently, the one (chieftainship) a right to things realized through a hold on persons, the other (bourgeois) a hold on persons realized through a right to things.

•

Food was not classed as "wealth" [i.e. blankets, shell ornaments, canoes, etc.] Nor was it treated as wealth. . . "holy food," a Semiahmoo informant called it. It should be given freely, he felt, and could not be refused. Food was evidently not freely exchanged with wealth. A person in need of food might ask to buy some from another household in his community, offering wealth for it, but food was not generally offered for sale (Suttles, 1960, p. 301; Vayda, 1961.)

Input-Output Economics

If you want to analyse the consequences on the economy of a petroleum shortage, say, nothing does it better than Leontief's system. Unlike most other economic theories around, it is driven by supply rather than (supposedly) manipulable) demand.

—SB

Input-Output Economics
Wassily Leontief
1966; 257pp.
$9.50 postpaid
from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07440
or Whole Earth

Though its application is simple, the construction of an input-output table is a highly complex and laborious operation. The first step, and one that has little appeal to the theoretical imagination, is the gathering and ordering of an immense volume of quantitative information. Given the inevitable lag between the accumulation and collation of data for any given year, the input-output table will always be an historical document.

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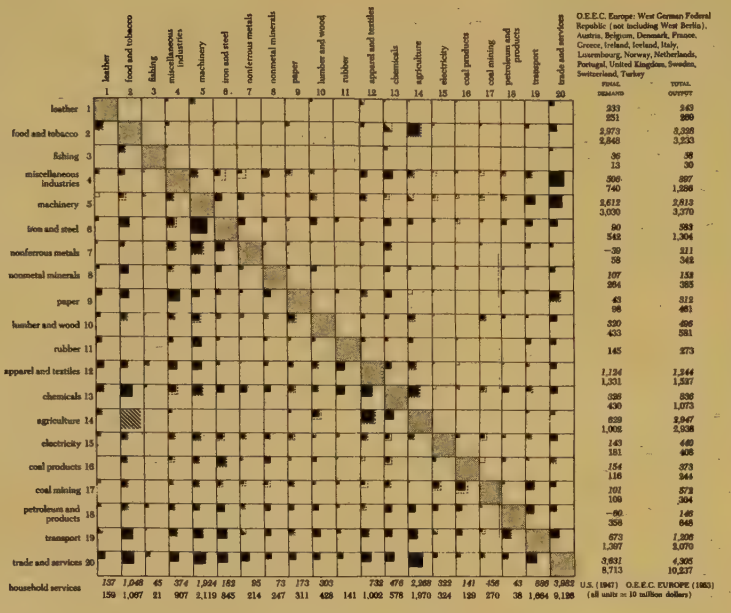
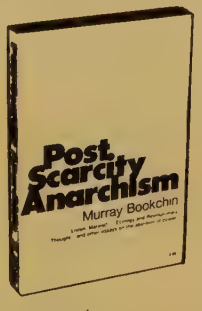


Developed economies of the U.S. (black squares and roman numbers) *and of western Europe* (open squares and italic numbers) *show great similarity in structure when their input-output tables are "triangulated" in same order and superposed. Areas of black and open squares overlapping are proportioned to volume of interindustry transactions, scaling from largest black square at row 6, column 5, Diagonal-lined square at row 14, column 2, indicate transactions too large for this scale. "Intra-industry" transactions, along diagonal, are not shown. The two negative figures in western European final demand indicate that imports of the commodities in question exceed domestic deliveries to final demand.*

Post Scarcity Anarchism

There are few creatures rarer than a good critic. Murray Bookchin is a radical whose intelligence and originality continually needles other radicals into re-thought. Read him. Watch your premises squirm.

—SB



Post Scarcity Anarchism
Murray Bookchin
1971; 286pp.
$2.95 postpaid
from:
Ramparts Press
Box 10128
Palo Alto, CA 94303
or Whole Earth

To an evergrowing extent, technology is viewed as a demon, imbued with a sinister life of its own, that is likely to mechanize man if it fails to exterminate him. The deep pessimism this view produces is often as simplistic as the optimism that prevailed in earlier decades.

•

Our technology and environment became totally inanimate, totally synthetic—— a purely inorganic physical milieu that promoted the deanimization of man and his thought. To bring the sun, the wind, the earth, indeed the world of life, back into technology, into the means of human survival, would be a revolutionary renewal of man's ties to nature. To restore this dependence in a way that evoked a sense of regional uniqueness in each community—— a sense not only of generalized dependence but of dependence on a specific region with distinct qualities of its own—— would give this renewal a truly ecological character.

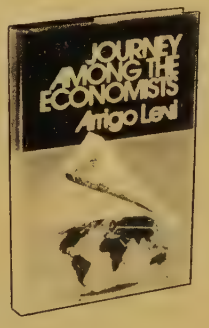
•

Capitalism has already established the physical mechanism of circulation—— of distribution and transportation—— that is needed to maintain society without any state apparatus. This physical mechanism of circulation can be vastly improved upon, to be sure, but it would still be as workable the day after the revolution as it was the day before the revolution. It needs no police, jails, armies or courts to maintain it. The state is superimposed on this technical system of distribution and actually serves to distort it by maintaining an artificial system of scarcity.

Journey Among the Economists

Not a bad way to become world-current in economic theory—— travel with this agreable Italian to the offices and homes of Paul Samuelson, Miltra Friedman, Walter Heller, Jay Forrester, Nikolai Fedorenko, and etc. and etc.

—SB



Journey Among the Economists
Arrigo Levi
1973; 284pp.
$8.95 postpaid
from:
Library Press, Inc.
Opencourt Pub. Co.
Box 599
LaSalle, IL 61301
or Whole Earth

Given the bureaucratic rigidities of the Soviet economy, would not the real (or even "socialist") market be more efficacious than this "simulated" electronic market?

Fedorenko answered by maintaining the opposite: his electronic iterations, he said, would be superior to market bargainings because they would be quicker and would always take into account the whole framework of the economy. "The capitalist market", he said, "works with a time-lag and does not recognise global demands; therefore it can operate in a destructive sense. Our mechanism, on the other hand, works with an eye to the future and takes into account the interests of society as a whole." Coming into operation in a "just" society, this shadow-market would moreover express a more rational model of consumption demand, and the use of resources. In short, Fedorenko's *rynok v kabinete* would be a super-market free from the imperfections of the actual market; by expressing itself in an optimal organic plan, it would guarantee an economy without cycles and without crises.

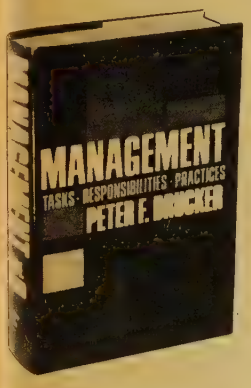
•

Even a sober scientific person like Tinbergen already glimpses on the furthest horizon of the foreseeable future the day when, in the words of the Italian economist Sergio Ricossa, "prosperity, which has brought the economists fame, will end by taking it away from them, and will take away their trade at the same time".

Management

This looks to be Peter Drucker's magnum opus on his special domain, institutional management. I use a previous book of his, **The Effective Executive** *(Pg.* **183***) so routinely that if I worked in the middle of any hierarchy at all I'd request a work leave of about two weeks to go sit under a tree, get adequately stoned, and imprint Drucker's organizational notions. Townsend's* **Up The Organization** *(Pg.* **183***) would do nicely as a chaser, or antidote, depending.*

—SB



Management
(Tasks, Responsibilities, Practices)
Peter F. Drucker
1973; 839pp.
$15.00 postpaid
from:
Harper & Row
General Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Management is work, and as such it has its own skills, its own tools, its own techniques. A good many skills, tools, and techniques are discussed in this book, a few in some detail. But the stress is not on skills, tools, and techniques. It is not even on the work of management. It is on the tasks.

•

The mechanism for making the worker take responsibility for job and tools is what the Japanese call "continuous training." Every employee, often up to and including top managers, keeps on training as a regular part of his job until he retires. The weekly training session is a regular and scheduled part of a man's work. It is not run, as a rule, by a trainer but by the men themselves and their supervisors. The technical people, e.g., the industrial engineers, may attend but do not lead; they are there to help, to inform, to advise—— and to learn themselves.

•

The final proof of the sincerity and seriousness of a management is uncompromising emphasis on integrity of character. This, above all, has to be symbolized in management's "people" decisions. For it is character through which leadership is exercised; it is character that sets the example and is imitated. Character is not something a man can acquire; if he does not bring it to the job, he will never have it. It is not something one can fool people about. The men with whom a man works, and especially his subordinates, know in a few weeks whether he has integrity or not. They may forgive a man a great deal: incompetence, ignorance, insecurity, or bad manners. But they will not forgive his lack of integrity. Nor will they forgive higher management for choosing him. . . A man should never be appointed to a managerial position if his vision focuses on people's weaknesses rather than on their strengths. The man who always knows exactly what people cannot do, but never sees anything they can do, will undermine the spirit of his organization. Of course, a manager should have a clear grasp of the limitations of his people, but he should see these as limitations on what they can do, and as challenges to them to do better. He should be a realist; and no one is less realistic than the cynic.

A man should not be appointed if he is more interested in the question "Who is right?" than in the question "What is right?" To put personality above the requirements of the work is corruption and corrupts. To ask "Who is right?" encourages one's subordinates to play safe, if not to play politics. Above all, it encourages them to "cover up" rather than to take corrective action as soon as they find out that they have made a mistake.

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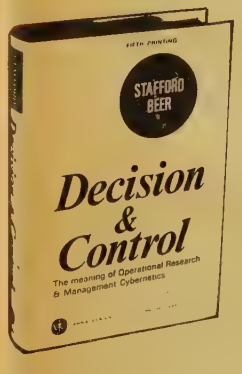
Decision & Control

Stafford Beer is one of the half-dozen international heavyweights in cybernetics (he was hired by Allende to make the Chilean economy cyber-responsive; soldiers cut short the experiment). This is Beer's central book—— a literate, well-experienced evocation of the best in operations research: the structure of management. There are insights well beyond the realm of business here as well as clear advice on how to make your expensive institutional computer earn its keep.

—SB
[Suggested by Heinz von Foerster]



Decision & Control
Stafford Beer
1966; 556pp.
$16.25 postpaid
from:
John Wiley & Sons, Inc.
One Wiley Dr.
Somerset, NJ 08873
Western Dist. Center
1530 South Redwood Rd.
Salt Lake City, Utah 84104
or Whole Earth

Rather than to solve problems it is clever to dissolve them; there is then no residual task of implementation.

•

Management of every kind of enterprise, from the smallest firm to national and international government, is for the most part in the hands of people who do not know what science has accomplished in the management field—— and who would not believe it if they did. Still less have these people made any attempt to evaluate the meaning and the potential of such a discipline as operational research, or such a science as cybernetics. They find it easy to shrug off the demonstrations and the arguments of scientists by declaring them, *ex cathedra*, to be impracticable. This leaves the scientist with a moral duty to return the charge. For there are whole firms and whole countries that are slowly but steadily collapsing under the ineptitude of their impracticable policies; and it is hard not to think that the same may be true of mankind itself.

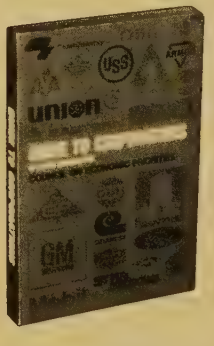
•

It is the scientist who knows that the real world cannot possibly map on to his model of the world, because the laws of communication theory prove conclusively that his brain has not requisite variety. But the bad manager is one who acts as if he believed that his conceptual model of the world really did encompass the real world. This is how it happens that the very taking of a decision can *mean* that the decision is right. For any evidence generated in the real world that the decision is in fact wrong does not belong to the model of the world which the manager entertains, and can therefore not be mapped on to his brain. He himself would say that he might be wrong; and he would agree with the scientist that, if he is, the rest of experience will show that his policy has failed. The interesting thing is that this never happens. One of the reasons for this is that the sub-group of people to which this man belongs shares the same model, which is fixed by the conventions of the social group. Therefore if *A* does something which he believes to be right, *B* will believe it to be right as well; the model they share says it is right. If the real world is meanwhile protesting that the decision is wrong, there may be no means of registering the fact with either the manager or his peers.

Guide to Corporations

At present the best countervailing force to destructive corporate megalomania is the reed-thin critical voice of the Council on Economic Priorities. They study cheap and thorough, and publish their findings with deadly effect. Here are their techniques and their report-cards on the lesser and greater wielders of the oil, paper, steel, automobile, airline, and chemical industries.

—SB



Guide to Corporations
Joe Zalkind,
Project Director
1974; 393pp.
$4.95 postpaid
from:
Swallow Press, Inc.
1139 S. Wabash Ave.
Chicago, IL 60605
or Whole Earth

When it comes to the question of social responsibility—— that is to the exercise of power in areas that the economist calls loaded with "external effects"—— we know very little. And the reason for our ignorance is that most corporations refuse to make public the kinds of information we need in order to know how they behave in regard to hiring blacks, or making anti-personnel bombs, or installing anti-pollution devices in their plants.

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The **Pentagon Papers** may have marked an end to an era of mindless secrecy in government. Perhaps this book will mark a turning point in the equally mindless secrecy in the exercise of corporate power in areas that critically affect our lives.

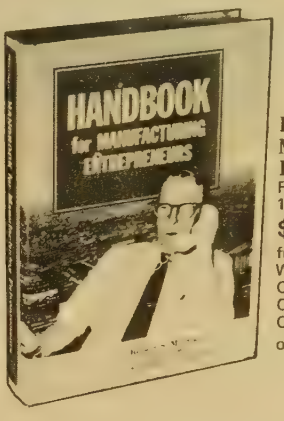
Cream Rises
BUSINESS

Up The Organization *The radical manager* **183**
Management *Drucker's opus* **709**
Accounting for Everyday Profits *Accounting essentials* **184**
The Peter Principle *The rise of incompetence* **183**

Handbook for Manufacturing Entrepreneurs

I have no idea if this is the best book on the subject, but I'm satisfied it's a good one—— sensible and thorough. It always seems like a good thing to me when some wild operation rises up out of its garage and makes a fair-sized business of itself. Such an entrepreneur-adventurer has a lot of risks to run and old mistakes to make that Mr. Morrison's book might reduce.

—SB



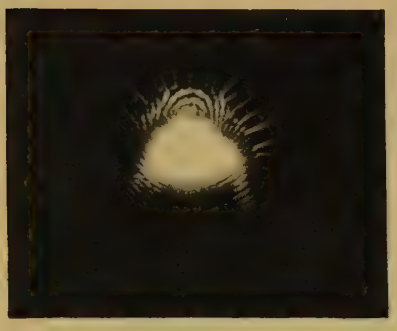
Handbook for Manufacturing Entrepreneurs
Robert S. Morrison
1973; 558pp.
$17.50 postpaid
from:
Western Reserve Press, Inc.
Case Western Reserve Univ.
Quail Bldg.
Cleveland, OH 44106
or Whole Earth

Here are some of the problems and errors frequently met in starting up a typical owner-managed company:

1. The owner is overly optimistic about the prospects of the business.
2. He does not have as much knowledge and ability or as many skills as he thinks he has, nor does he take steps to improve his abilities.
3. He under-estimates his competitors.
4. He over-estimates the superiority of his product, his process, his connections, the abilities of his key people etc.
5. He has not thoroughly studied, tested, and researched his market, his product, and his process.
6. He misallocates his funds to the wrong assets. Too much is spent on some items, leaving too little for others and for operating losses.
7. His overhead (including his salary and expenses prior to getting into production) is too large.
8. He is in such a hurry to get things done that he wastes time and money, pays excessive overtime, and wears himself to a frazzle.
9. He neglects to plan ahead. He does not set up a realistic time table for the completion of each step in his program nor does he list everything needed for each project and follow through to see that it is there when needed.
10. Now that he is the boss, he may feel that he can issue orders to others and no longer has to work so hard himself.
11. He neglects his record-keeping, with the result that he does not know how much money he is losing nor how fast he is losing it.
12. He may be so afraid of running out of money that he does not make needed expenditures. The owner-manager should try to maintain a proper balance, since failure to do this can result in significant losses.
13. He misallocates his own time or his people's time.
14. He goes into the business without sufficient equity money. He may raise what appears to be corporate equity money on his company's books by personal borrowings at a high rate of principal repayment. To service these loans, he may take a larger salary than he should.
15. He operates from crisis to crisis, putting out fires after they start but never preventing them.
16. He develops a "big-shot" complex. (Suppliers' salesmen are adept at inflating the egos of their customers.)
17. He over-commits his company on purchases, on promises to customers, to new personnel, etc.
18. He tries to force things to happen before they possibly can happen; thus, his entire corporation becomes uncoordinated.
19. He underestimates the costs and times involved in major projects.
20. His facilities are inadequate, not strong enough, or not properly balanced.
21. He tries to take on too many things at once.
22. If he runs into unexpected difficulty or delay in getting his original product under way, he may switch over to some new product or process that appears to be simpler. As a result, he may never get either one going.

•

Learning



Kirlian photo of fingertip by Robert Wishlaw

SOME RULES AND HINTS FOR STUDENTS AND TEACHERS.

RULE ONE: find a place you trust and then, try trusting it for a while.

RULE TWO: general duties of a student—— pull everything out of your teacher—— pull everything out of your fellow students.

RULE THREE: general duties of a teacher—— pull everything out of your students.

RULE FOUR: consider everything an experiment.

RULE FIVE: be self-disciplined—— this means finding someone wise or smart and choosing to follow them. To be disciplined is to follow in a good way. To be self-disciplined is to follow in a better way.

RULE SIX: nothing is a mistake. There's no win and no fail, there's only make.

RULE SEVEN: the only rule is work. If you work it will lead to something. It's the people who do all of the work all of the time who eventually catch on to things.

RULE EIGHT: don't try to create and analyse at the same time. They're different processes.

RULE NINE: be happy whenever you can manage it. Enjoy yourself. It's lighter than you think.

RULE TEN: 'We're breaking all the rules. Even our own rules. And how do we do that? By leaving plenty of room for X quantities.' (John Cage)

HINTS: always be around. Come or go to everything. Always go to classes. Read anything you can get your hands on. Look at movies carefully, often. Save everything—— it might come in handy later.

–Corita Kent

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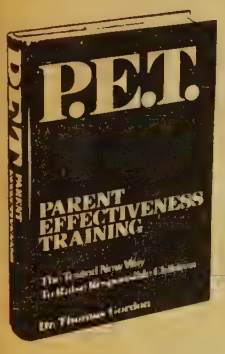
P.E.T.

For parents looking for an alternative to being strictly authoritarian, overly permissive, or oscillating between the two extremes, this book presents a systematic way to change your parental style. Called a "no-lose" method for resolving family and generational conflict, Parent Effectiveness Training teaches "active listening"—— the language of acceptance, rather than that of moralizing, dictating, blaming, ridiculing, and all the other vocabularies of control. Dr. Gordon relates numerous stories in which parent-child tensions were resolved in creative and healthy ways, using techinques which are spelled out in detail in this book. Gordon's suggestions are eminently reasonable—— they require only that parents put some energy and perseverance into changing the way they deal with their children.

—DH



P.E.T.
(Parent Effectiveness Training: The tested new way to raise responsible children)
Dr. Thomas Gordon
1970; 338pp.
$7.95 postpaid
from:
Peter H. Wyden, Inc.
David McKay Co., Inc.
750 Third Ave.
New York, NY 10017
or Whole Earth

Opening the Door, Then Slamming It Shut

When they first try active listening, some parents start to use it to open the door for their children to communicate, but then they slam the door shut because they do not keep up the active listening long enough to hear the child out completely. It's like saying, "Come on, tell me what you feel, I'll understand." Then, when the parent hears what the child feels, he quickly shuts the door because he doesn't like what he hears.

Teddy, age ten, is looking down in the mouth and his mother moves in to help:

Mother: You look like you're unhappy. [ACTIVE LISTENING.]

Teddy: Frankie pushed me.

Mother: You didn't like that. [ACTIVE LISTENING.]

Teddy: No. I'm going to bust him right in the mouth.

Mother: Now, that wouldn't be a nice thing to do. [EVALUATING.]

Teddy: I don't care. I'd like to punch him like this [swinging hard.]

Mother: Teddy, fighting is never a good way to solve conflicts with your friends. [MORALIZING.] Why don't you go back and tell him you'd like to make up? [ADVISING, OFFERING SOLUTIONS.]

Teddy: Are you kidding? [Silence.]

•

If parents could learn only one thing from this book, I wish it were this: Each and every time they force a child to do something by using their power or authority, they deny that child a chance to learn self-discipline and self-responsibility.

Charles, a seventeen-year-old son of two very strict parents who used their power constantly to get Charles to do his homework, made this admission; "Whenever my parents are not around, I find it impossible to pull myself out of the chair in front of the TV set. I am so used to their making me go do my homework, I cannot find *within myself* any power to make me go do it when they are not at home."

Parent Effectiveness Training

Dear WEE,

Thanks for starting again. When you stopped your authority doubled. Smart move.

To learn effective parenting, teaching, managing, counseling and humaning communications and problem solving skills I recommend Dr. Thomas Gordon's Effectiveness Training Associates, Inc. They'll teach you what you need to know to get good at meeting needs—— yours and others. There are different courses for the different areas above, with different materials, lengths, and costs.

The skills learned in ET work. They did for my parents, they do for my brothers and sisters and our friends. Write the Pasadena address, they'll get you in touch with a local representative.

Effectiveness Training Associates, Inc.
110 S. Euclid Ave.
Pasadena, CA 91101

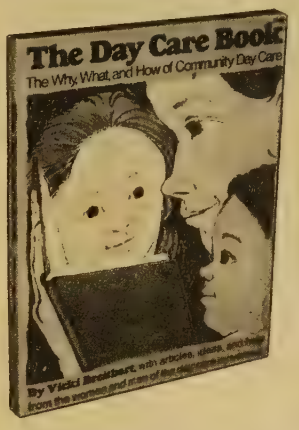
Peace,
Kristen Klawson
Indianapolis, IN

The Day Care Book

Contains much of the contemporary wisdom on the politics and sociology of day care. It is oriented towards parents, concerned citizens who want access to information and funding for their own programs, who want to explore options for sharing child-care, and who are open to looking at promising models in other countries. It is a realistic and exciting book which questions traditional assumptions about sex-role stereotyping, relationships between kids and adults, institutional goals vs. peoples' goals, etc.

The resources section at the end includes information on licensing, budget, funding sources, equipment and materials suggestions and a full annotated bibliography. The format is lively; the attitudes clearheaded and caring.

—Marcia Perlstein



The Day Care Book
(The Why, What, and How of Community Day Care)
Vicki Breitbart
1974; 211 pp.

$3.95 postpaid
from:
Alfred A. Knopf, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

There is little doubt that a child needs love, affection, consistent care, guidance, and physical and intellectual stimulation. The controversy is not around what the child needs as much as how, where, and by whom she or he is going to get it. As Margaret Mead has pointed out:

> Actually, anthropological evidence gives no support at present to the value of such an accentuation of the tie between mother and child. . . . On the contrary, cross-cultural studies suggest that adjustment is most facilitated if the child is cared for by many warm, friendly people.

•

How to Father

Men. . . have been taught to believe that too much involvement in the upbringing of their children is somehow unmanly and likely to compromise their masculinity.

But for the man willing to take the plunge into active fatherhood, here is help—— organized in sections from infancy through late adolescence—— read as they grow. Dodson's child rearing techniques include active listening and no-lose conflict resolution. Fathers are advised to make distinctions between a child's feelings and actions: A child can learn to control his actions, but he cannot learn to control his feelings.

Suggestions are practical——

How to tell a story: . . . ham it up! Put in lots of funny sounds and noises. Use a simple trick of the public speaker: raise or lower your voice dramatically at times. Let your child move the story along by asking him from time to time, "And what do you think happened next?" Never fear—— he will tell you!

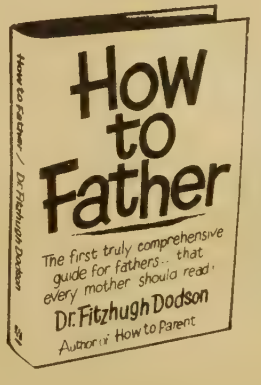
—— and human——

If you're playing in the sand pile with your child but having a miserable time because that's just not your cup of tea, then don't do it! Your child will sense your discomfort and will not gain much from the time you spend together.

Resourceful appendices: toys and play equipment (some to make), book lists (65pp. classified for age/subject), records, and other books and sources for the man hooked on active fathering.

Men who value wives and daughters will recognize Dodson's chauvinism in his advocacy of traditional women's roles for daughters/wives—— a rather inconsistent position for a psychologist advocating male involvement in the traditionally female world of child rearing. Liberated men will look elsewhere for supplementary feminist material.

—Betty Moss



How to Father
Dr. Fitzhugh Dodson
1974; 520pp.
$8.95 postpaid
from:
Nash Publishing Corp.
E.P. Dutton & Co. Inc.
201 Park Ave. S.
New York, NY 10003
or Whole Earth

When telling children about the divorce, remember the legal oath, "To tell the truth, the whole truth, and nothing but the truth." Adopt part of this oath as a guideline for what you tell the children. Be sure to tell the truth and nothing but the truth. Children can take the truth much better than we think, but lies will only cause them to lose faith in you. And children are very quick to detect when they are being lied to. However, this doesn't mean you must tell a child "the whole truth." The gruesome details of what caused your marriage to break up are irrelevant.

•

I. The Stage of Toddlerhood (approximately from first to second birthday.)

A. Books for "Labeling the Environment"

At this age a "book" is not something that contains a continuous narrative story, but something with pictures of people or objects, and words labeling those people or objects. Books are useful devices at this age to help your child play the "label the environment" game we discussed in the chapter on toddlerhood.

Books for this age should be sturdy affairs, of cardboard or cloth, because the first thing your toddler will probably do with these beginning books is put them in his mouth.

1. Sears or Montgomery Ward catalog, trading stamp catalogs, or toy catalogs. Although ordinarily not thought of as books, these catalogs are ideal for playing the "label the environment" game. And who cares if a few pages get torn out here and there?

2. **Best Word Book Ever**, Richard Scarry (Western Publishing). This book is one of the best investments a parent could ever make for a toddler. When you have finished playing the "label the environment" game with this book, with its 1,400 gaily illustrated objects with words to match, your child will have a vocabulary of 1,400 words. A terrific boost to his language development! Uniquely appealing animals are pictured in all kinds of activities related to a young child's experience and interest. This book can be used for several years with a young child.

3. **The Cat in the Hat Beginner Book Dictionary**, Dr. Seuss (Random House). Another excellent picture dictionary to play "label the environment." Funny pictures and a phrase show the meaning of 1,000 words in Dr. Seuss's inimitable style. You can read it to your child when he is a toddler. And he can read it himself in the first three grades of school.

4. **My First Book** and **My First Toys** (Platt and Munk). Extra sturdy, vividly colored books. Each page clearly pictures three objects you can point to and teach your toddler to name.

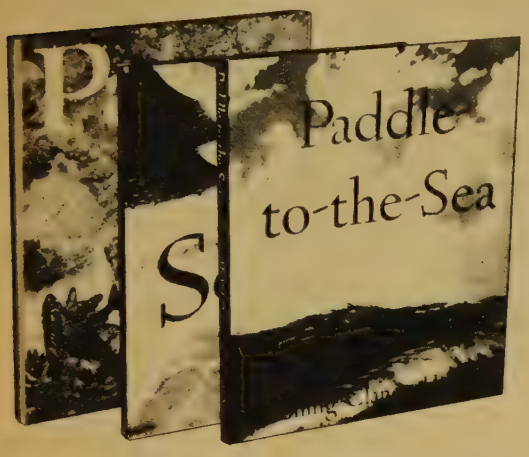
Cream Rises
PARENTING

Baby and Child Care *Granddaddy of 'em all* 366
How to Parent *Parenting from birth to six* 366
How to Father *Basics for Dads* 711
P.E.T. *Revamping parental style* 711

Paddle-To-The-Sea, etc.

In their research, conception, writing, and especially illustration, the works of Holling Clancy Holling are the most engrossing children's books I know. Each one follows the life-history or travels of a creature or model creature through adventurous times. **Paddle-to-the-Sea,** *a myth I grew up to, recounts the journey through the Great Lakes of a model canoe carved by an Indian boy, with a miniature of himself on board.* **Tree In the Trail** *is the story of a cottonwood tree on the old Santa Fe trail.* **Minn of the Mississippi** *is a turtle who drifts from Minnesota to New Orleans.* **Seabird,** *another model, goes to sea on a whaling ship.* **Pagoo** *is a hermit crab with a crowded tide-pool career. Good for innumerable re-readings.*

–SB



Paddle-to-the-Sea
1941
$4.20 postpaid

Tree In The Trail
$4.95 postpaid

Seabird
1948; 63pp.
$4.07 postpaid

Minn of the Mississippi
1951
$4.07 postpaid

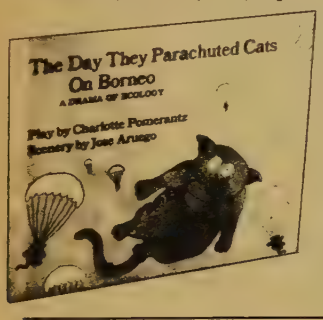
Pagoo
1957; 87pp.
$4.23 postpaid

all from:
Houghton Mifflin Co.
Wayside Road
Burlington, MA 01803
or Whole Earth

The Day They Parachuted Cats On Borneo

The caption for an illustration in this book says "If you don't know what ecology means, you'll soon find out,". . . and by gosh, you do.

In the exotic setting of tropical Borneo, the story traces, link by link the ecological chain leading from malaria mosquitoes via DDT, and cockroaches ("People are so anti-roach"), and caterpillers, to geckoes, to pussycats.



The Day They Parachuted Cats on Borneo
(A Drama of Ecology)
Play by Charlotte Pomerantz, Scenery by Jose Aruego
1971
$4.75 postpaid
from:
Addison-Wesley Pub. Co., Inc.
Reading, MA 01867
or Whole Earth

When the cats and lizards can no longer keep the rats and roaches and caterpillers under control, you can imagine the plight of the poor farmers of Borneo. Para-pussycats come to the rescue, and have a lovely time solving the problem. They are cheered and honored by the farmers, even given king-size beds to sleep in. However, the ending is only a semi-happy one. After all, an ecological system once disturbed cannot be perfectly reconstructed. Plans for costumes in the flat style of Balinese puppets, are shown throughout the book should one want to actually produce the play. These and other illustrations are whimsically done in soft colors. My favorites are the lettuce green geckoes munching the sky blue caterpillers.

–Connie Pyle

We're the rats on the island of Borneo,
We never had it so good-heigh-dee-ho.
When the cats who had swallowed the geckoes lay dying,
We crawled in by thousands from forests outlying.
When the farmers saw us, they raised an anguished cry:
"Rats bring plague! Fly in help, or we shall surely die.
Help us, men of science, help us kill the rats;
For the DDT you sprayed has killed off all our cats!"
"Borneo for rent," we sang. "Inquire, please, within.
When the cats die off from DDT, we rats-move-in."

The Juniper Tree and Other Tales from Grimm

An authentic, unbowdlerized rendition of 27 of the German stories which were first published in English one hundred and fifty years ago. The translations are remarkably faithful; the art work is the finest Sendak has done, and that is very fine indeed. His illustrations capture the cruelties, the illusions and bewitchment, the presence of Death and demons, the darkening forest at the heart of Grimm's tales.

–DH

The Juniper Tree and Other Tales from Grimm
Lore Segal and Maurice Sendak
1973; 332pp.
$12.95 (two volumes, postpaid boxed)
from:
Farrar, Straus and Giroux
19 Union Sq. West
New York, NY 10003
or Whole Earth

Once there was a mother and the goblins had stolen her child out of the cradle. In its place they laid a changeling with thick head and staring eyes who did nothing but eat and drink. In her misery, the woman went to ask her neighbor for advice. The neighbor told her to take the changeling into the kitchen, set him on the hearth, light a fire, and boil water in two eggshells. This would make the changeling laugh, and when a changeling laughs, that's the end of him.

The woman did just what the neighbor told her, and as she was putting the eggshells full of water on the fire, the blockhead said:

"Now am I as old
As the western woods
But never heard it told
that people cook water in eggshells,"

and he began to laugh and as he laughed there suddenly came a lot of little goblins who brought the right child and set it on the hearth and took their friend away with them.

Cream Rises
CHILDREN'S BOOKS

The Juniper Tree and other tales by Grimm *Grim but splendid Grimm* 712
Indian Tales *Great stories, purely Indian* 369
Paddle-to-the-Sea *Illustrated detail* 712
At the Pond *Beauty and survival* 713
Andrew Lang Fairy Books *Once & future fairy tale collection* 373
Watership Down *High adventure & rabbit lore* 713
Cathedral *Elegant art/history* 713
Free to Be. . You and Me *Down sex roles, up liberation . .* 713

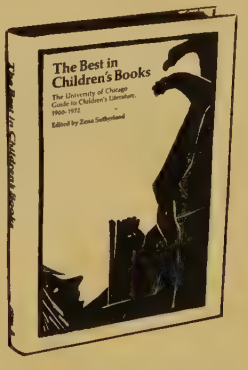
The Best in Children's Books

Zena Sutherland knows children's books. This famous children's literature specialist–– who has probably read and reviewed more children's books than anyone else in the world–– shares her insight and knowledge with teachers, librarians, parents, anyone who selects books for children.

Her book consists of 1400 succinct (100 to 150 words), well written reviews accessed by six indexes. You have never seen a book so thoroughly indexed! These indexes make it possible to find books by title, developmental values (Baby, adjustment to; Grandparent-child relationships; Sex roles; Truthfulness), curricular use, reading level, subject, type of literature (Fables, Historical fiction, Plays). A useful appendix supplies the addresses of American and British publishers by whom these books were produced.

The international scope, the high quality of the reviews, the thorough indexing make this a marvelous book. By including only the best books, the editor has already given you a head start in the selection process. The one drawback is the small period of time covered: 1966-1972.

–Connie Pyle



The Best in Children's Books
Edited by Zena Sutherland
1973; 484pp.
$9.95 postpaid
from:
Univ. of Chicago Press
11030 S. Langley Ave.
Chicago, IL 60628
or Whole Earth

Aiken, Joan. **Nightbirds on Nantucket;** illus. by Robin Jacques. Doubleday, 1966. 215p. $3.50. (Cape, 1966. 188p.

A tongue-in-cheek, no-holds-barred adventure story, replete with a cheerful waif, an absent-minded sea captain and his fragile little daughter, a black-hearted villain-spy and his cruel spinster sister, a pink whale and a vaudeville stereotype comic German scientist. Dido, eleven, is picked up out of the sea and sleeps for ten months; she is asked by the captain to be a companion to his little daughter, Dutiful Penitence Casket. The girls come to Nantucket and are treated as slaves by Dutiful's dreadful aunt–– who proves to be an imposter and none other than the villain's wicked sister; Dido is then instrumental in unmasking a plot to shoot Der Professor's transatlantic cannon in a Hanoverian scheme against King James. Naturally, the cannon is towed off by a friendly pink whale. Dripping with quaintnesses and brine and stereotypes and valor and all sorts of things that make the book a romping burlesque.

•

Du Bois, William Pene. **Lazy Tommy Pumpkinhead;** story and pictures by William Pene Du Bois. Harper, 1966. 32p. Trade ed. $3.95; Library ed. $3.79 net.

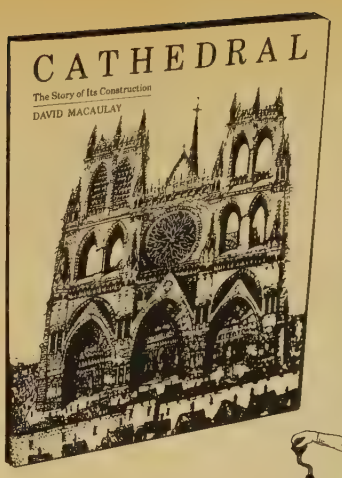
A nonsense story with delightful, daft illustrations; in the terrible tale of Tommy there is a not-so-subtle message about sloth, or the mechanized age, or physical fitness, or Something. It isn't likely that the reader will care, since the spectacle of Tommy Pumpkinhead sliding from his electric bed to his automatic bath and down to automatic dressing and feeding is capped by the spectacle of all this happening with an upside-down Tommy after the electricity fails.

•

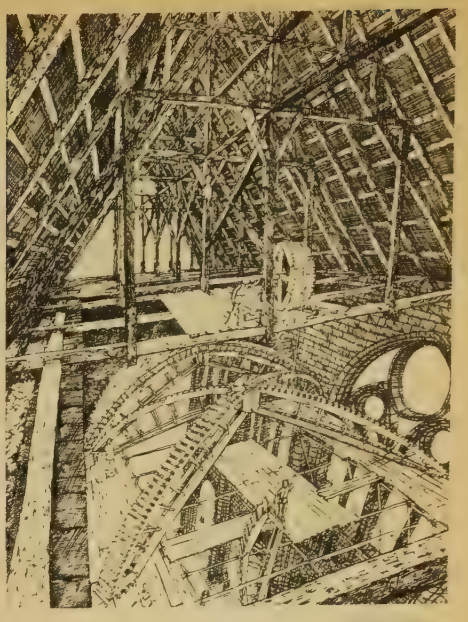
Cathedral

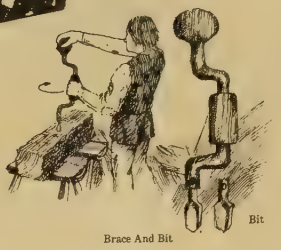
If you wonder at the majesty of a Gothic cathedral, you and your children will cherish David Macaulay's book. It is a delight: compact, lucid, dramatically illustrated. Macaulay shows the process of building a cathedral, an imagined structure somewhere near Amiens, Beauvais, and Rouen, from mid-thirteenth to mid-fourteenth century. Through his brief descriptions and especially in his lively drawings, we watch the craftsmen at work, each with particular tools: stone cutters, sculptors, masons, carpenters, blacksmiths, and glass blowers. The site is laid out, the plans drawn, stone quarried, foundations dug, timbers cut —— and over the years rise the piers, buttresses, and walls that support the elaborate ceiling and roof. We witness the hoisting into place of tracery, the piecing together of vaults, the making of stained glass, and the casting of bells. Before our eyes the architectural miracle takes place. To our sense of awe the book adds an appreciation of the community of skills that created these monuments of human devotion and ingenuity.

—Dunbar Ogden



Cathedral
(The Story of its Construction)
David Macaulay
1973; 80pp.
$6.95 postpaid
from:
Houghton Mifflin Co.
Wayside Rd.
Burlington, MA 01803
or Whole Earth





In November, as in every previous winter, the finished stonework was covered with straw and dung to prevent the frost from cracking the mortar before it had completely dried. Most of the masons went home for the winter because mortar work cannot be done in cold weather. Other work continued, however, for temporary workshops were built against the finished walls of the choir to house the stone cutters, who could no longer work outside. There they cut stones and tracery, carved capitals and sculptures in preparation for the return of the masons in the spring.

•

While the windows were being installed, plasterers covered the underside of the vault and painted red lines on it to give the impression that all the stones of the web were exactly the same size. They were eager for the web to appear perfect even if no one could see the lines from the ground.

Stone cutters and sculptors finished the moldings and capitals while masons laid the stone slabs that made up the floor. They created a maze pattern in the floor. Finding one's way to the center of the maze was considered as worthy of God's blessing as making the long pilgrimage through the countryside that so many had to make in order to worship in a cathedral such as Chutreaux's.

At the Pond

This is really good nature writing for older children. Most children are curious about the lives of animals that are living free, without men to impose patterns of behavior or blunt their instincts. Here are three stories that give a pretty good idea about life in the wild. The raccoon, the crow and the muskrat all live near the same pond. All are governed, not by man, but by the harsh justice of nature. All have a great drive to live. As you follow each animal through a full cycle of seasons, their experience of birth and death, pain and pleasure, fear and contentment, is woven by nature into a balanced, meaningful whole. The author portrays the nascent thoughts and emotions of the creatures in a believable, realistic way, never even hinting at anthropomorphism. This is not Walt Disney. Russell's style is a pleasure to read. It is clear, precise, almost poetic.

—Connie Pyle

At the Pond
Vol. I: Corvus the Crow
(116pp. $5.50)
Vol. II: Lotor the Raccoon
(92pp., $5.50)
Vol. III: Datra the Muskrat
(110pp., $5.95)
Franklin Russell
1972
from:
Four Winds Press
50 W. 44th St.
New York, NY 10036
or Whole Earth

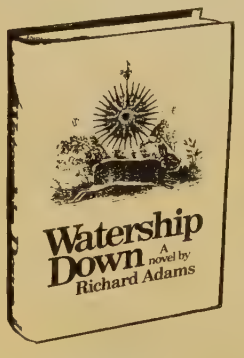
The breakup of the raccoon family was inevitable and necessary. Lotor must prepare her youngsters for the winter. She could do this only by insuring good hunting. Some years, all her family did not leave her. She might den with one who could not make the break at once. This year, a great acorn crop of the upland oaks drew Lotor in long, nocturnal journeys. She preferred acorns above almost every other food. As long as the acorns lasted, she was bound to lead her family to them and gorge. Each night, she traveled with other loose groups of raccoons, families and individuals, lured by the common harvest.

Lotor's appetite for acorns was all the sharper because she remembered the failure of the crop two years before. Acorns were an almost essential food, but they made raccoons dependent. The last great crop of three years before had helped all her family survive, the youngsters fit and healthy and ready to disperse to the east and west. When the crop failed the following season, there was no outlet for the surplus raccoons. She remembered how hungry bands of them had prowled in futile search for acorns, had fought viciously, and grown thin. Lotor had held her territory, despite her hunger, while all around her the others faded away, dying in burrows or migrating uselessly. The acorns had failed everywhere.

Watership Down

Middle Earth it isn't, but until another Tolkien comes along, **Watership Down** *and its rabbit odyssey will surely do. Ignore both extremes of a spectrum of reviews ranging from "banal bunnies" to "an instant classic." Adams has worked the real magic of creating, on the English downs, a whole other world for us to live in and believe in. The rabbit lore is authentic and fascinating, and Adams has plotted a rousing good story. Enjoy.*

—DH



Watership Down
Richard Adams
1972; 429pp.
$6.95 postpaid
from:
Macmillan Publishing Co.
Order Dept.
Front & Brown Sts.
Riverside, NJ 08075
or Whole Earth

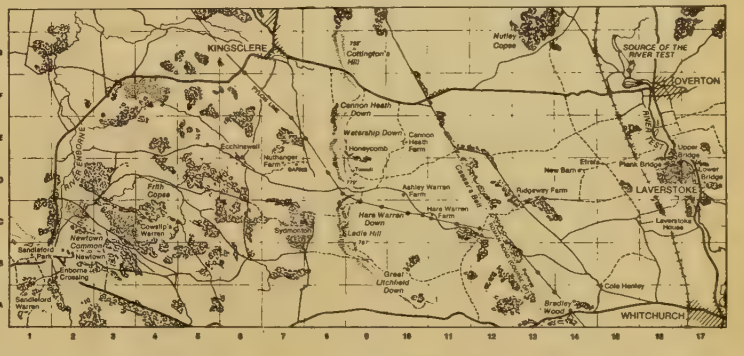
Frenzied with distress, Hazel leaped out of the gap and squatted beside him. Bigwig's eyes were closed and his lips pulled back from the long front teeth in a fixed snarl. He had bitten his lower lip and from this, too, the blood was running. Froth covered his jaws and chest.

"Thlayli!" said Hazel, stamping. "Thlayli! Listen! You're in a snare—— a snare! What did they say in the Owsla? Come on—— think. How can we help you?"

There was a pause. Then Bigwig's back legs began to kick once more, but feebly. His ears drooped. His eyes opened unseeing and the whites showed bloodshot as the brown irises rolled one way and the other. After a moment his voice came thick and low, bubbling out of the bloody spume in his mouth.

"Owsla—— no good—— biting wire. Peg—— got to—— dig out."

A convulsion shook him and he scrabbled at the ground, covering himself in a mask of wet earth and blood. Then he was still again.



Free to Be. . . You and Me

A collection of goodies which affirms the best in all of us; one intended to be shared by adults and children. Includes songs, dialogues, cartoons, stories, photographs, poems and letters which express perspectives on the joy of growing up liking oneself, preserving spontaneity and joy, allowing oneself to experience the full range of available emotions, being able to be aware of others, enjoy them and connect with them. Specifics include "Boy Meets Girl", "Parents are People Too", "Housework", "The Pain", "William's Doll", etc.

Reading this book together, children and adults can experience each other in a very special and important way.

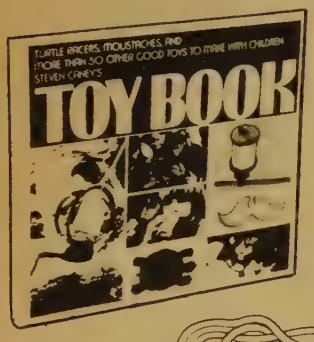
—Marcia Perlstein

Free to Be. . . You and Me
Developed and edited by Carole Hart, Letty Cottin Pogrebin, Mary Rodgers and Marlo Thomas
1974; 143pp.
$4.95 postpaid
from:
McGraw-Hill Book Co.
c/o Trade Order Service Dept.
Princeton Road
Hightstown, NJ 08520
Manchester Rd.
Manchester, MO 63011
8171 Redwood Highway
Novato, CA 94947
or Whole Earth

Toy Book

Want to make a waterscope and magnifier, or a hexaflexagon, or a rope machine (that makes real rope)? Simple instructions for these and 48 other toys and games, with plenty of photos and diagrams, make the **Toy Book** *a must for kids and anybody else interested in conjuring up delightful playthings out of odds and ends and scraps of stuff around the house. Make your own discovery toys, pretending toys, games, building toys, action toys and design toys without spending much (if any) money. You'll learn about the physical world and the make-believe world with these do-it-yourself toys—— and half the fun is in the making. All the toys were designed and tested on a whole herd of children by a professional designer and toy consultant who helped design the Boston Children's Museum. For kids age 1 through 11 and parents of all descriptions.*

—Sylvia Jacobs



Toy Book
Steven Caney
1972; 176pp.
$3.95 postpaid
from:
Workman Pub. Co. Inc.
231 E. 51st St.
New York, NY 10022
or Whole Earth

Tube Telephone

Materials: old garden hose, 2 plastic funnels, about 4 in. in diameter

Tools: penknife

Construction

Try to find an old, ready-to-be-discarded garden hose, and tape up any holes or cuts. If you must buy a new hose, get the cheapest one you can—— it will work fine. Hoses usually come in 25- and 50-foot lengths. You can make a TUBE TELEPHONE as long or as short as you want by using one hose or putting two or more together. Cut the metal couplings off the ends of the length of hose, and push a funnel into each end; see illustration. Now you are ready to "hook up the line," so find someone to talk with, and pick two places to talk from. The TUBE TELEPHONE doesn't have to be straight; it can make as many twists and curves as you want, but do be sure the hose doesn't get bent closed, which will stop the sound from traveling through. While one person talks into one end of the phone, the person at the other end listens by holding the funnel up close to an ear. Invent code signals, like saying the word "over" when you are finished talking and want a reply. If you get very ambitious, you can make branch lines by adding one or more "Y" hose connectors and some more hoses. This way you can have three- or four-way conversations. The next time you see a big shipping box—— the kind a refrigerator, stove or washing machine comes in—— you might try making a telephone booth for a little more privacy.

•

Clothespin wrestlers

Place your bets. Wind up the wrestlers—— not too tight—— and carefully put them down. Now quickly let go. For a few seconds the wrestlers will knock each other all over the place, but in the end, one wrestler will land on top of the other and be the winner. Sometimes neither wrestler will win. Is it a game of chance or a game of skill? Can you predict which wrestler will win? Does it make any difference how much you wind up the wrestlers or the way you put them down? Play is the process of finding out. You might try having clothespin wrestling contests, with winners playing winner. Maybe you know how to make a champion wrestler.

Materials: 2 clothespins, fat rubber band

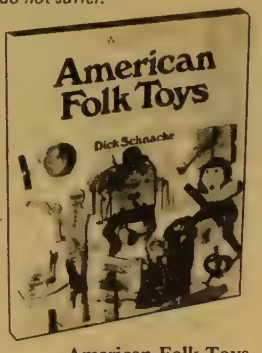
Construction

Decorate each of the clothespins a different color, with the meanest looking faces you can draw. Round wood clothespins work best. Look carefully at the illustration, and hook the rubber band around both clothespins as shown. Now you're ready to wrestle.

American Folk Toys

Dick Schnacke has gathered together instructions, diagrams, and materials lists for a number of early American folk toys that are fun and easy to make: apple dolls and cornstalk fiddles, whimmydiddles, Flap Jacks and Skyhooks. This is the paperback issue of **American Folk Toys**, *published in a larger size hardback version in 1973. There are a few less items carried in the paperback, but the drawings actually improve by being somewhat reduced in size, and the diagrams do not suffer.*

—Dorothy Atkins



from:
Penguin Books, Inc.
7110 Ambassador Rd.
Baltimore, Md. 21207
or Whole Earth

American Folk Toys
Dick Schnacke
1973; 160pp.
$3.50 postpaid

FLIPPERDINGER

Materials:

1 (A) Blowpipe, elder branch 5/8" diam. x 12" long
1 (B) Jet Tube, elder branch 1/4" diam. x 1-3/4" long
1 (C) Plug, piece of small cork that fits the end of the blowpipe
1 (D) Pith Ball, cornstalk center pith
1 (E) Wire, hard-drawn copper 26 ga. (.016" diam.) x 2-3/4" long
1 (F) Wire, copper 16 ga. (.051" diam.) x 18" long
(G) Glue, white

Folk Toys Around the World

This international collection of folk toys from 23 different countries—— with construction plans, detailed diagrams, and illustrations of the completed toy—— makes a fine companion book to **American Folk Toys**. *The authors tell something of the cultural background of each toy, and provide a listing of sources for needed materials. Young craftsmen should find the instructions clear, the format easy to follow, and the finished creation satisfying.*

—DH

Folk Toys Around the World
(And How to Make Them)
Joan Joseph
1972; 96pp.
$4.95 postpaid
from:
Parents' Magazine Press
52 Vanderbilt Ave.
New York, NY 10017
or Whole Earth

Flip Ball From China

Like many folk toys, the origin of the Cup and Ball has been lost in antiquity. It is believed that it was known in ancient Greece, and there is evidence it was in Italy at an early date.

In the late 16th century it was the rage of France: King Henry III played Cup and Ball as he walked the streets and the members of his Court were obsessed with the toy. Cup and Ball was fashionable with the upper class, and even the most humble peasant of the countryside took to it. Its popularity lasted for over a hundred years, and in the 18th century the daughter of King Louis XIV had a Cup and Ball toy.

Today, it is thought of as a traditional folk toy of Mexico, but its original home points to the East. Although documentation is certainly scarce on the Flip-Ball toy, it is believed to be an ancient folk toy of China, and, traditionally, is held to be the forerunner of the Cup-and-Ball toy of the Western world.

In 1778, when Captain James Cook visited the Sandwich (Hawaiian) Islands, he noted that the islanders played a form of Cup and Ball. Ring and Ball, as they called the toy, was made of plaited cane; this appears to have been a step in the modification of the Eastern to the Western toy.

Today, as a result of renewed interest in folk arts and a revival in traditional folk crafts, the ancient Cup-and-Ball game once again is being made in China and is popularly called "Flip Ball."

The Top

A very thorough history of tops, their characteristics and social significance, in all their variations, from earliest times to the present day. The principal types are classified, as well as the various top games which have appeared over time. Materials from which tops have been made are discussed, as are the technical aspects of top motion, including practical purposes to which the top principle has been put, such as navigational aids, weaponry, and gyroscope instruments. The concluding chapter investigates the spiritual and personal significance of the top through history. A most complete study of a most unusual and fascinating subject. Many illustrations, including specimens from Egyptian, Greek, and Roman times.

—Sylvia Jacobs

The Top
(Universal Toy, Enduring Pastime)
D.W. Gould
1973; 271pp.
$7.50 postpaid
from:
Clarkson N. Potter, Inc.
419 Park Ave. S.
New York, NY 10016
or Whole Earth

Man has always been fascinated by the top. He regards it with wonder because it is an object to which he can impart controlled motion. The motion is both visible and nearby, as opposed to a ball or projected object that quickly comes to rest and at a distance. For a brief instant man is a god and has seized a bit of magic; he has made an object stand erect in defiance of gravity.

•

a. *The Twirler* started by twisting action of fingers or hands upon the axis.
b. *The Supported-top* started by cord while top is held upright.
c. *The Peg-top* cast, and the twisting action of a cord on the body of the top imparts spin.
d. *The Whip-top* the body of the top is lashed to give continued motion.
e. *The Buzzer* bidirectional motion through twisting of the cord.
f. *The Yo-yo* bidirectional motion due to inertia and successive energy input.

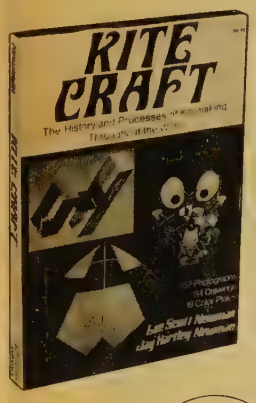
Cream Rises
TOYS

Toy Book *Homemade fun, all ages* 714
Kite Craft *Kite fans' best buy* 715
Creative Playthings *Reliable & inventive* 367
Pollock's Toy Theatres *Victorian playtime revisited* 715
American Folk Toys & Folk Toys Around the World *The universe of folk toys* 714

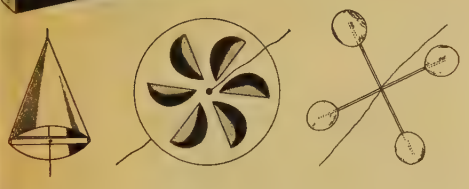
Kite Craft

If you're really into kite flying, this book is for you. Probably it would be a good text for a group (kids, adults, or both) seriously involved in the sport. It's not casual reading; it's good solid stuff with heavy sections on the aerodynamics of kites and basic construction techniques. Everything you ever wanted to know about kite flying and more.

—Heidi Seney



Kite Craft
(The History and Processes of Kitemaking Throughout the World)
Lee Scott Newman and Jay Hartley Newman
1974; 214 pp.
$4.95 postpaid
from:
Crown Publishers
419 Park Ave. S.
New York, NY 10016
or Whole Earth



Climbers

If the kite is stable and flying well, you then have the luxury of a little more fun at the wind's expense—— by sending up kite climbers on the flying line.

An elementary but satisfying climber is made with a piece of heavy paper or cardboard. Cut a slit from a center hole to the outer edge so that the paper disc slips onto the line. Now tape the slit closed again. Push this paper disc a few feet up on the line until the wind catches it like a sail, carrying it up the line to the kite bridle.

Variations on this simple messenger design include curling the ends of brightly colored paper (so the climber will spin on its way up), using different shapes of paper cut-outs, vents, pinwheels, cones, and the like. Dozens of these may be sent up on a single line.

A cone-shaped messenger can be filled with cut paper or confetti. If there is a reasonably strong wind, the wind pressure on the inside of the cone should be sufficient to hold confetti inside until the jolt of the cone striking the kite bridle jars the contents loose.

More elaborate kite climbers employ a mechanism combining pulley wheels, strips of bamboo, paper or cloth, and wire. One such device rides up the line with the help of a pair of square sails flanking two pulley wheels. A wire contraption, which is built between the sails as diagrammed, releases a miniparachute "payload" when its leading tip strikes a cork that was fastened to the line earlier. Also released upon impact with the cork bumper are the two cords which kept the wings from folding under the wind pressure. The wings then fold, and the weight of the climber causes it to fall back into your hands.

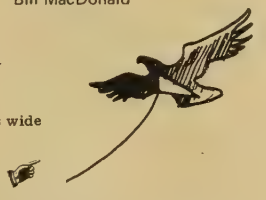
Nantucket Kiteman

Dear Mr. Brand:

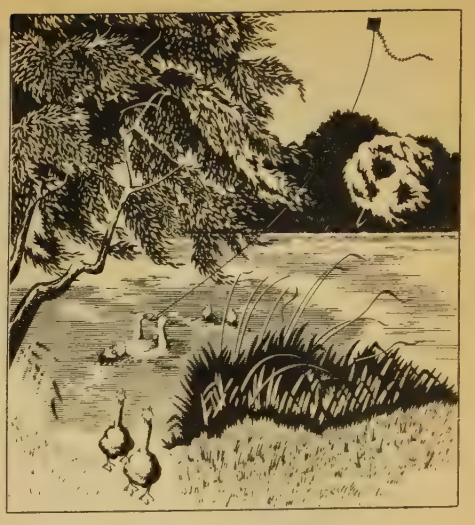
I thought you might be interested in knowing about the Nantucket Kiteman for the Catalog or Epilog. . . he makes the finest kites I've seen. They run from $6.50 to about $30.00, so they aren't inexpensive. . . but they are extremely well-made and fly beautifully. We have had 2 of them for about 5 years and give them a yearly workout; they've held up very well. Enclosed is a copy of his flyer; I imagine he would appreciate a self-addressed stamped envelope if anyone would like a copy sent to them.

Yours truly,
Bill MacDonald

Nantucket Kiteman
Box 1356
Nantucket, MA 02554



Approximately 65 inches wide
Black with yellow
Brown with yellow
Navy with white
$30

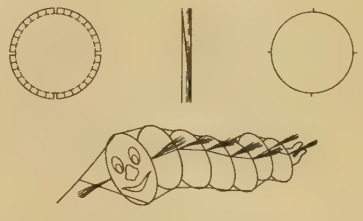


Kite Folio

Kite Folio *is obviously the work of someone devoted to kites: their history, their construction, their special skills and joys. Kites from many countries and cultures are included, with historical anecdotes, building diagrams, materials lists, and instruction for flying, as well as marvelous large scale illustrations (the book measures 14" by 11" in size). There is an apparent renaissance of kite flying interest today——* **Kite Folio** *shows me why.*

—DH

Kite Folio
Timothy Burkhart
1974; 31pp.
$5.00 postpaid
from:
Double Elephant Folio
& Quarto Co., Inc.
P.O. Box 4310
Berkeley, CA 94704
or Whole Earth



Caterpillar Kite

Ingredients: For each disc - 1 rattan reed, 1/2" x 48": 2 dowels, 1/16" X 16". Covering, string, white glue, transparent tape, 10" X 3' tail, and an old broom.

1. For each of seven discs, measure 15-½" circle. Within it mark 13-1/2" circle. This leaves 1" all around for flaps. Draw two perpendicular lines through the center.
2. Mark each reed at center and 2-1/2 " from each end. Shave each end so ends join as illustrated. Form circle of reed, glue and tie at 2-1/2" marks.
3. Cover frames, bending reeds to fit paper circle.
4. Insert, tie and glue two 16" braces to each circle.
5. Bind and glue small bundles of broom straws to end of each horizontal brace. Balance each disc on edge of yard stick. Trim straws to achieve balance.
6. Join discs 12" apart at four points.
7. Glue tail, cut as shown, to back of seventh disc.
8. Attach two-leg bridle to top and bottom of face.
9. Reinforce bridle holes and brace openings with transparent tape.

Pollock's Toy Theatres

Pollock's is a unique English company devoted to keeping alive the traditions of Victorian toy theatre. Housed in a delightful old multi-level, many-roomed toy museum in London, they make marvelous reproductions of the colorful miniature scenery, characters and playbooks so popular with children of that era. In the 19th century every well-known stage production was faithfully copied in cardboard miniature, and Pollock's republishes these, with authentic prosceniums from the lavish theatres of the day. Each kit includes a cardboard theatre, with scenery, characters and a script for the play. The actors are about 3" high and the backcloths are 7" x 6". All that's required for construction is a sharp knife or scissors, and glue.

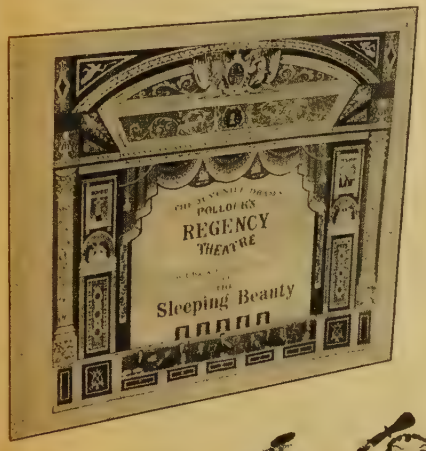
Prices range from 82p (delivered to U.S.) for smaller sets, to more elaborate sets like the Redington Theatre (with a proscenium opening 11" x 9" and stage 13" deep), costing several pounds.

A sampling of available plays: **Ali Baba and the 40 Thieves, St. George and the Dragon, The Daughter of the Regiment, The First Night of Twelfth Night, Cinderella, The Sleeping Beauty, The Corsican Brothers.**

—DH

A charming brochure and price list for all the kits and various miniature theatre accessories is available from:

Pollock's Toy Theatres
1, La Scala St., W1
London, England



Prince What voice, I wonder, called me to this wood?

(Enter Fairy Queen (No. 6) L.H.)

Fairy The voice was mine; I called you for your good.
Beyond these trees there lies a fair Princess;
A Hundred years she's slept, and now, unless
You can awake her, there in sleep she'll lie
Until another hundred years go by.

Prince I go at once——

Fairy Before you do, beware!
You must approach the Princess with great care.
A wicked ogre has been set to guard her;
He'll chop you up and put you in his larder.

Prince I'll fight him! But I fear I have no sword. . .

Fairy Around your neck, supported by a cord,
You wear a hunting horn——

Prince I do indeed.

Fairy I'll put a mystic spell on it.

(Music)

Pay heed!
The next three times you blow that horn enchanted
Your dearest wish that moment will be granted.

(The Fairy Queen exits)

Prince (calling) If any ogre lurks among these trees,
Then show yourself, and quickly, if you please.

(Enter Ogre Frostytoes (No. 5) R.H.)

Frostytoes What's this? A little Prince! My word, what luck;
With meat, I swear, more tender than a duck;
I'll have him for my supper, fried in batter——

Prince I have a different view upon the matter.

(Take off the Prince, quickly; put on the Prince blowing the horn (No. 12) R.H. Make the noise of a hunting horn off-stage.)

Make Your Own Musical Instruments

This book is especially useful for alternative schools with low budgets. It's full of ideas for making musical instruments out of flower pots, coconuts, cheese boxes, bottles, cans, shells, hoses. . . junk. Best of all, perhaps, the authors encourage young people to have fun with music, avoid the intimidation that often turns kids off to learning an instrument.

—Scott Beach

Make Your Own Musical Instruments
Muriel Mandell and Robert E. Wood
$3.95 postpaid
from:
Sterling Pub. Co. Inc.
419 Park Ave. S.
New York, NY 10016
or Whole Earth

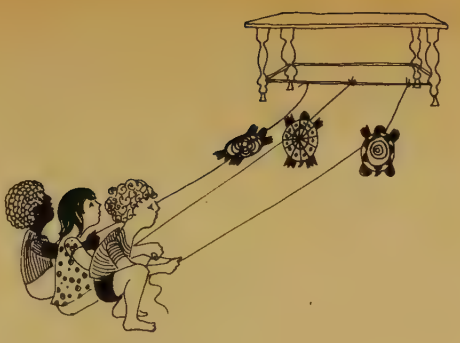
LEARNING

Making Things

Hundreds of art/craft improvisations for hands of any age. Simple drawings and words show how to turn odds and ends into masks, puppets, toys, weaving looms, paper hangings. Most materials are either household salvage or minimal cost. Activities include paper making/9 kinds of printing/skate scooters/spinners/cardboard racing turtles/pasta and paper clip beads/candle casting/bread dough sculpture. Instructive and FUN.

—Betty Moss

Making Things
(The Hand Book of Creative Discovery)
Ann Wiseman
1973; 159pp.
$3.95 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154
or Whole Earth



Cardboard Racing Turtles

My mother introduced this game to us as children and I've never seen it played anywhere. Yet it is so simple and such fun especially when grown-ups join in.

Use: A shirt cardboard. Trace a dish circle, draw head, tail, arms and legs.

Decorate with crayons or paint--Make both sides like the front.

Cut out the turtle. Make string hole. Measure 10' of string. Tie one end of string to table leg. Thread string through turtle. Pull string taut, and turtle will stand. release and he'll flop forward. Pull-flop to the top of the string, flip him over and pull-flop home. Make 3. Find 2 friends and have a race.

Tin Can Lanterns

1. Fill can with water
2. Put cans to freeze (approx. 2 days)
3. Draw design on can with crayon or marker
4. Put frozen can on pillow or towel so it won't roll.
5. Use big and small nail holes for variation
6. Use thin coat hanger wire for handles & hanging loops

Cardboard Carpentry

"Cardboard Carpentry is an ancient craft. . . well, sort of old anyway, at least as old as the cardboard box."

Cardboard is a natural for the classroom—— the board is forgiving, since a fairly straight cut is about as good as a perfect one. Mistakes aren't fatal, and are often a step toward innovative design.

THE MATERIAL offered by the cardboard carpentry people is a sturdy, three layers thick cardboard called Tri-Wall—— orderable in almost any size, "even 24 feet, if you are crazy enough to want such a piece." This is a versatile material, adaptable to people-sized tables, chairs, storage units, boats, domes, or smaller esoterics like puppets, puzzles, and doll houses.

TOOLS can be as simple as carpenter or keyhole saws and paring knives, or more sophisticated—— sabre saws and specialized items from the cardboard people's catalogue.

The Further Adventures of Cardboard Carpentry
George Cope and
Phylis Morrison
1973; 69pp.
$3.50 postpaid
from:
Workshop for
Learning Things, Inc.
5 Bridge St.
Watertown, MA 02172

Workbook on cardboard carpentry—— how to cut, slot join, strengthen, and preserve cardboard creations. Many photos of people and cardboard in progress together. Patterns for tables, storage units, boxes, chairs, a cradle, wagons, dividers/screens, puppet stage, domes, more. . . A real turn-on to design and construction with heavy cardboard.

Aquarium

You can even make an aquarium of cardboard. Make a very strongly constructed box, such as this one.

Our Catalog Fall '74
(Workshop for Learning Things, Inc.)
1974; 40pp.
$ .50
from:
Workshop for
Learning Things, Inc.
5 Bridge St.
Watertown, MA 02172

This catalog of creative educational materials includes:
Cardboard related items
- *Tri-Wall Board ($3.92 per 4' x 8' in lots of 100)*
- *Tool kits for working the board*
- *Dome kit*

Many other kits—— here's a sampling. . .
- *Photography: camera/developer kits*
- *Sifting and sorting sets*
- *Pre-cut storage units and boxes for the classroom/other working furniture*
- *Soapstone carving supplies/kits*
- *Mechanical building/construction sets (modules, struts, pulley wheels, gears, rachet brakes, axles, etc.)*
- *Clock works kit*
- *Stream tables*

. . .more

—Betty Moss

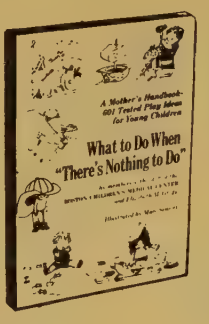
Bow Drill MA009-4 1 lb. $2.00

This is a simple version of an ancient tool consisting of bow, thong, shaft and wood base. Although made of some modern materials, it drills holes in shell, wood and stone just as the ancient bow did. Learning the skill to get this tool to make holes, maybe for beads, is very satisfying in itself.

What To Do When "There's Nothing to Do"

This is an excellent little book of play suggestions (601 of them!) for babies, crawlers and toddlers, and two to six year olds, utilizing ready to hand items like cartons & clothes-pins, shoe laces & aluminum foil, hair rollers & old nylons. The play ideas are based on well considered theories of child development—— how children behave at different ages and how they learn through play. One reservation: you would never know from the text or illustrations of the book that many mothers work or that many fathers take extensive responsibilities for child care and household chores. About the only play idea involving father is "A Trip to See Daddy at Work," to let the child in on the mysterious real world where Daddy spends his day. With that caveat in mind, this is a good resource for the harried parent of either sex; there's a helpful appendix which charts play ideas by child's age, play materials, and type of play: active, quiet, for a sick child, outdoor, indoor.

—DH



What To Do When "There's Nothing To Do"
Staff members of the Boston Children's Medical Center and Elizabeth Gregg
1967; 158pp.
$4.50 postpaid
from:
Delacorte Press
Dell Publishing Co. Inc.
1 Dag Hammarskjold Plaza
245 E. 47th St.
New York, NY 10017
or Whole Earth

Clay Play

Children between two and three love to play with something they can pound and squeeze, break apart and put together again. Tearing and pounding give them an opportunity to express feelings they are not yet able to put into words. A fretful child will often be much calmer and happier after a good pounding session with clay.

All the ingredients for clay are right in your kitchen.

Play dough:

1 C salt
1½ cups flour
½ cup water
2 tablespoons oil
a few drops of food coloring (optional)

This dough lasts for weeks if you store it in the refrigerator in a plastic bag or a covered jar. Children can pull and pound it, and then it can be collected and put away for another day, or they can make "things" and leave them out to dry and harden. (Small children may put this dough in their mouths. It won't taste good, but it won't hurt them.) Let your child sit at the kitchen table or on the floor, using a cookie sheet for a working space. Dust his hands with a little flour so the dough won't stick to his fingers. He may just want to pound and squash the dough with his hands. Or he might have fun with:

a rolling pin
cookie cutters
dull knives, forks, and spoons.

In the Early World

This book is a gentle, charming record of the discoveries made by a New Zealand teacher and the children he taught (and who taught him) in a country school. Their approach to learning about themselves and their world was through open-air nature studies, crafts, writing, and general enjoyment of life. This book is a testament to the spontaneity and beauty that children bring to learning when given the chance. The art work they produced, richly illustrated in the book, is outstanding, and what they wrote reveals their awareness of and sensitivity to their unfolding world:

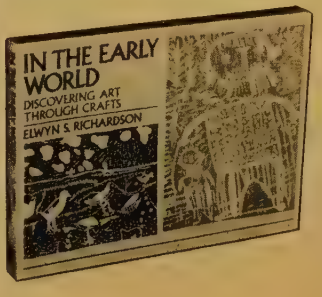
Shells

In the shingle chattering shells
Crackle in heaps
Their pretty colours showing

Anna

This is an art book, a poetry book, a chronicle of events, and a record of a teaching method that every parent and every teacher ought to know about.

—Sylvia Jacobs

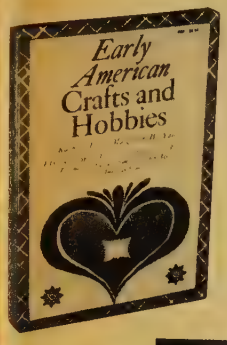


In the Early World
(Discovering Art Through Crafts)
Elwyn S. Richardson
1964; 217pp.
$4.95 postpaid
from:
Pantheon Books
457 Hahn Rd.
Westminster, Md.
21157
or Whole Earth

Early American Crafts and Hobbies

Twenty-three crafts are here carefully researched to give readers a thorough understanding of the history and mechanics of each. The history of the crafts is as exciting as the prospect of getting into the work in most cases. Excellent instructions, many fine illustrations. A few of the crafts covered are: transparencies, wall paper design, Berlin wool work, hand-printed fabrics, tinware, furniture stenciling, fruit and flowers in wax, china and glassware decoration. This book will be invaluable for those really into Early American crafts and hobbies, and a perfect stimulus for those thinking about getting into craft work. Some of the things are really easy to do, and some require quite an investment of time and energy. All will pay off handsomely in terms of fine things to make yourself.

—Sylvia Jacobs



Early American Crafts and Hobbies
Raymond F. & Marguerite W. Yates
1974; 221pp.
$2.95 postpaid
from:
Shipping & Service Ctr.
Funk & Wagnalls
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

Victorian ladies did spatterwork by filling the spaces between the teeth of a comb with ink and then running their fingers over the teeth to spray the ink on the work. A toothbrush with nylon bristles is much better for this purpose. A knife blade is used to flex the bristles in a direction opposite the work to be spattered, care being taken to test the spread of the spatter.

The Reverend Huber method of drying flowers. Hot, treated sand is sifted over the specimens and the box set away for several days.

The figures delighted every child, and the modelling went on and on. Each figure was discussed as it was completed, in the same way as the poetry and lino prints were. The satisfaction mounted for a time, until a day came when five poor and incomplete heads and figures were done and the whole activity stopped It was one of those spiritless end-of-the-week Fridays, when creative work (and surely formal lessons too) should have been abandoned in favour of some relaxing occupations.

•

I saw that at times there was a definite advantage in studying the unusual before the usual, the aberration before the normal, and the rare example before the common one. When we saw a rare white heron in the harbour region we visited it and watched for a time. We studied white herons and egrets, and this led on to the study of the reef heron, which was common here. This approach allowed for more comparative work and more scientific discovery by the child.

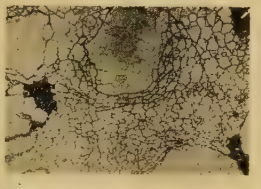
Wonder Under Your Feet

A book written not for art historians and critics, but for those who would like to see more in the things they look at every day, to rediscover the aesthetic echoes that accompany the commonplace. The book probes ways of looking at the world, personal ways as well as ways that carried the messages of different ages to us through time. Reproductions of classical and modern art, photographs illustrating artistic aspects of everyday objects and places.

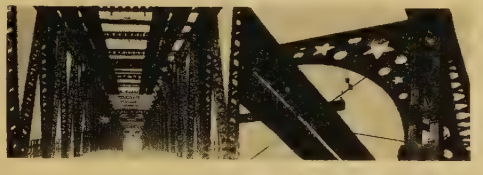
—Sylvia Jacobs

Wonder Under Your Feet
(Making the World of Art Your Own)
Jean Mary Morman
1973; 88pp.
$3.95 postpaid
from:
Harper & Row Gen. Bks.
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Or try Donald Burgy's "Order Idea No. 3":
Do something everything does.
Do something everyone does.
Do something you often do.
Do something you often do but do it better.
Do something you've never done.
Do something no one has ever done.
Do something requiring that your life change for it.
Do something requiring that everyone's life change for it.
Do something that changes everything.



Sidewalk cracks

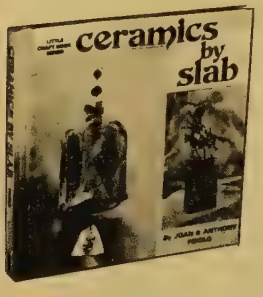


LOOK for the refreshing evidences of man's *thinking new* in the most unexpected places. This mundane steel bridge provides narrow two-lane passage across the Chicago River on Grand Avenue. Its design seems to be just utilitarian symmetry until you look closely and detect the pattern of stars in the beams. *Someone* was thinking new, someone marvelously human.

Ceramics by Slab

The Little Craft Book Series (of which Ceramics by Slab *is a part), although expensive, is one of the best craftbook series published. Their presentations lend themselves both to the novice who knows nothing and to the more experienced craftsperson.* Ceramics by Slab *shows you "how to do it" with illustrations of the successive steps and the finished product. The color photographs are excellent.*

—Dorothy Atkins



Ceramics by Slab
Joan & Anthony Priolo
1973; 48pp.
$3.00 postpaid
from:
Sterling Publishing Co.
419 Park Ave. S.
New York, NY 10016
or Whole Earth

Storing and Keeping Clay Workable

In order to keep your clay workable for a period of time (from several days to weeks), first, spray the clay project with water; then wrap a wet cloth round the clay and cover with a plastic bag. The wet cloth is not necessary if you plan to work on the clay the next day. You can also enclose a damp sponge in the bag.

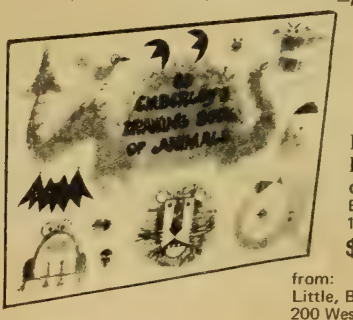
By spraying the clay with water at intervals and keeping it covered with a plastic bag, clay projects can be kept in a workable state indefinitely.

To keep finished flat surfaces, such as plaques and tiles, from curling, cover with a plastic sheet, so that the work dries slowly.

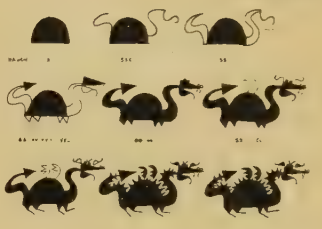
Ed Emberley's Drawing Book of Animals

Every kid over the age of 5 should have this book, it's such a winner. Once kids hit kindergarten they seem to lose that spontaneous yen to paint and draw and they tighten up. A lot of them say, "I don't know how." This book makes it easy—— I've never seen it to fail. The idea is that there are a certain number of basic shapes and from these you can draw anything. Starting with an ant (a dot), Emberley carries you along through a number of animals to the ultimate in fancy drawing: a dragon (mostly pointy triangles).

—Heidi Seney



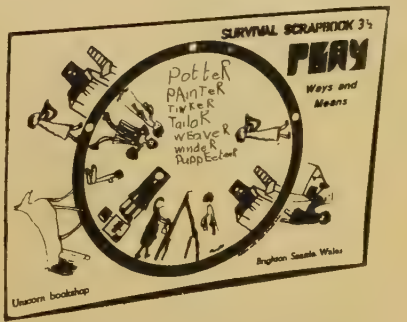
Ed Emberley's Drawing Book of Animals
Ed Emberley
1970; 30pp.
$2.95 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154
or Whole Earth



Survival Scrapbook: 3½: Play

For crafts-oriented people, this is a neat book, though I don't feel it is for everybody as the frontispiece indicates. Readers who have some basic crafts experience will find here imaginative ideas for using all sorts of at-hand and recyclable materials in delightful projects. The instructions are factual and to the point with no useless embellishments, and a lot of ideas are packed into a small space. As the authors are two young British women, some of the terminology and materials sources are English. Teenagers and their teachers especially should find this a luv of a book.

—Dorothy Atkins



Survival Scrapbook: 3½: Play
Ann Winn and Pauline Vincent
(A Unicorn Bookshop Production)
1973; 66pp.
$2.50 plus postage (approx. 10 oz.)
Books
84 Woodhouse Lane
Leeds, LS2 8AB
England

Drawing Techniques

"Sgraffito"—— Removing from the surface.

1. Cover stout white paper or card with a thick application of oil pastel (or white wax or candle wax.)
2. Cover this layer with Indian Ink mixed with soap (just rub the brush in the soap before dipping into the ink.)
3. Allow to dry thoroughly—— but use no heat.
4. The wax and ink can then be removed with anything sharp or rough—— i.e., nails, needles, hacksaw blades, sand paper.

This is a cheap and efficient form of Scraperboard—— it lends itself to the exploration of line and pattern and detail.

Variations

The paper may be crayoned in colour patches which will show when the black ink is removed. Gold paper, foil paper, glued to cardboard (by folding the gold paper over the sides and attaching to the back) makes a superb surface, cover with white wax or crayon, and black ink (+ soap). When scratched, the gold will be revealed through the black.

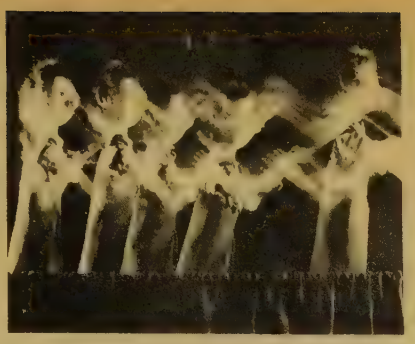
Making Puppets Come Alive

How do you bring puppets to life? With detailed instructions, easy-to-do exercises, and beautiful demonstration photographs (that indicate motion), Larry Engler and Carol Fijan show beginners how to develop the skills to make puppets jump, cry, sneeze and snore. They also show you everything necessary for putting on a full-scale puppet production. A first-rate introduction to puppetry.

—Dorothy Atkins

Making Puppets Come Alive
Larry Engler and Carol Fijan
1973; 192pp.
$9.95 postpaid
from:
Taplinger Publishing Co., Inc.
200 Park Ave. South
New York, NY 10003
or Whole Earth

The challenge of hand puppetry is in capturing the movements of the entire human body and projecting them through your hands into the puppet. There are three basic types of movement in hand puppetry: those done by moving your fingers, those by moving your wrist, and those by moving your arm. Moving your fingers inside the puppet corresponds to small movements of the human head and arms. Wrist movements correspond to motions at the human waist. The arm movements are the locomotion movements. All hand puppetry is a combination of these three types of movement.



Running. To give the illusion of running, your arm must move up and down rapidly and in a choppy manner, while moving the puppet quickly across the stage. The puppet that merely zooms across the stage is not seen. The choppy movement of the arm gives the necessary feeling of rapidity.

Kids are Natural Cooks

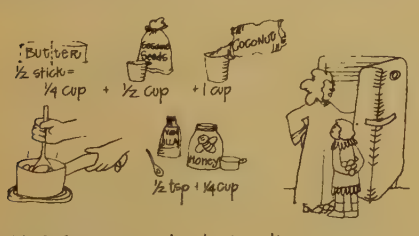
Kids are Natural Cooks *we found to be creative and sensible. Spiral bound, lots of illustrations that can be colored. Recipe instructions are illustrated for kids who can't read. It's set up by season with simple, good tasting, "obvious" foods. Valuable for mothers at home as well as useful to nursery school programs. It is a well thought out book and $3.95 is not outrageous these days.*

—Pat Longnecker

Kids are Natural Cooks
Parents' Nursery School
Roz Ault, Liz Vraneck
1972; 129pp.
$3.95 postpaid
from:
Houghton Mifflin Co.
Wayside Road
Burlington, MA 01803
or Whole Earth

Sesame Honey Candy

When the ancient Roman soldiers set out for battle, their main food during the long marches was a mixture of sesame seeds and honey. This candy may not make you as strong as a Roman soldier, but it does taste good.



In a big frying pan, over low heat, melt
¼ cup BUTTER
Stir in
½ cup SESAME SEEDS
1 cup grated COCONUT

Stir the mixture around over low heat for about 5 minutes.

Take the pan off the stove. Add:
½ teaspoon VANILLA
¼ cup HONEY

When the honey is all mixed in, put the candy in a cold place until it gets stiff enough to shape into balls. This will take about an hour in the refrigerator or half an hour in the freezer. Or set it in a pan of ice water.

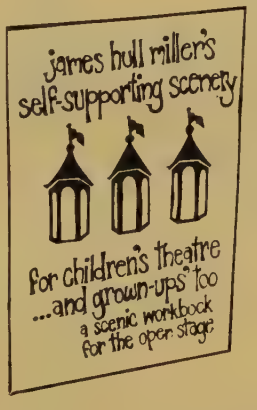
Roll the candy into little balls. You will have about 3 dozen. Keep the ones you don't eat right away in the refrigerator.

Self-Supporting Scenery for Children's Theatre. . . and Grown-ups' Too

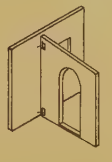
This workbook for Miller's "Arts Laboratory" in Shreveport contains practical procedures that will assist and even inspire school and community groups in the creation and execution of theatrical settings. In simple, step-by-step descriptions, Miller begins with the necessary equipment and shows how to build folding scenery (hinged screens), clamped scenery (frames joined by C-clamps or bolts), and combinations of these folds and slabs. He then includes material on designing and painting, and on the making of curved scenery, platforms, ramps, and several major props. Sketches and instructions are clear and easy to follow.

Because self-supporting scenery stands without braces or rigging, methods of its construction are of particular value for those who produce plays in open staging spaces such as school rooms, lecture halls, or recreational areas in community centers. More experienced designers will find here effective suggestions; less experienced designers will find basic techniques and some real encouragement.

—Dunbar H. Ogden



Self-Supporting Scenery for Children's Theatre. . . and Grown-ups' Too
James Hull Miller
1971; 91pp.
$4.00 postpaid
from:
James Hull Miller
3415 Reily Lane
Shreveport, LA 71105



Patterns for Designing Children's Centers

This manual takes a broad view of the child care situation and suggests a variety of environments for different programs in this field. While not a blueprint source, the book provides an abundant number of floor plans and illustrations to complement the written material. It covers all facets of the subject needed by readers who want to design their own centers.

—Marcia Perlstein

Patterns for Designing Children's Centers
Fred Linn Osmon
1971; 128pp.
$2.95 postpaid
from:
Educational Facilities Laboratories
477 Madison Ave.
New York, NY 10022

Cream Rises

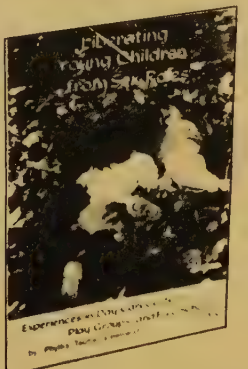
PLAY

Design for Play *Creating super playspaces* **719**
Children's Games in Street and Playground *Treasury of game info/history* **384**
Making Things *Creative & ecological improvising* **716**
Cardboard Carpentry *Access and inspiration* *Access and inspiration* **716**
Making Puppets Come Alive *Outstanding puppetry introduction* **718**
How to Start Your Own Preschool Playgroup *Founding mother's straight scoop* **719**
American Boys Handy Book *1882 boys' lore* **380**
The Psychology of Children's Art *Visual & mental treat* **372**
In the Early World– Discovering Art Through Crafts *Experiments in seeing world new* **716**
Creative Drawing *Unique graphic techniques* **372**

Liberating Young Children from Sex Roles

Consciously and unconsciously, adults teach sex-role stereotypes to young children every day. This booklet describes specific situations in which some Boston area teachers in child centers and nursery schools have worked out ways of countering this sterotyping. The situations are not contrived, and difficulties as well as successes are reported. Especially useful is the appendix, a list of young children's books that express a non-traditional concept of what it can mean to be a girl or a boy. This is an inexpensive, easy-to-absorb account of techniques that anyone can use to encourage children to try out as many roles and grow in as many directions as they like.

—Ruth Saxton



Liberating Young Children from Sex Roles
(Experiences in Day Care Centers, Play Groups and Free Schools)
Phyllis Taube Greenleaf
1972; 22pp.
30 cents postpaid
from:
New England Free Press
60 Union Square
Somerville, MA 02143

Boys have trucks.
Girls have dolls.

Boys are strong.
Girls are graceful.

Boys are doctors.
Girls are nurses.

Boys are policemen.
Girls are metermaids.

Boys are football-players.
Girls are cheerleaders.

Boys are pilots.
Girls are stewardesses.

Boys fix things.
Girls need things fixed.

Boys invent things.
Girls use what boys invent.

Boys build houses.
Girls keep houses.

I'm glad you're a boy.
I'm glad you're a girl.

We need each other.

These statements quoted from the children's book **I'm Glad I'm A Boy, I'm Glad I'm A Girl**, published by Simon and Schuster in 1970, blatantly teach attitudes and beliefs about sex role differences that parents, teachers, and the mass media teach in more subtle ways.

•

When **I'm Glad I'm A Boy, I'm Glad I'm A Girl** was discussed recently by a group of preschool teachers, it was felt that the book's clarity and simplicity regarding sex role differences would be helpful to children's development. Most of the teachers believed that boys and girls should be socialized in different ways. Boys should be prepared to assume roles of leadership and action; while girls should be prepared to be more "feminine," which meant dependent and passive. Their attitudes toward the book probably would have been different had it read:

Whites are doctors.
Blacks are nurses.

The rich are strong.
The poor are graceful.

The rich build houses.
The poor keep houses.

Americans invent things.
Asians and Africans use what Americans invent.

Design for Play

An in-depth look at children's play; from the philosophy and psychology of play, to playground design and miscellaneous opportunities for play in spaces designed for other uses.

> *Play can occur only in a condition of freedom, because it is above all doing what you want to do, when and where you want to do it.*

The social functions and universal aspects of play are explored, and nothing bearing on design and use of play spaces from the child's point of view is neglected. A case history of the Adventure Playground in Central Park in New York City is included which details the problems, solutions, and innovations which arose around the project. There is a portfolio of recent playgrounds in various parts of the country, and a chapter on playgrounds for handicapped children. Rich in illustrations and information, this book will be invaluable for all those grown-up people who are concerned with creating play spaces for children which are as excellent as they can possibly be.

—Sylvia Jacobs

Design for Play
Richard Dattner AIA
1973; 141pp.
$4.95 postpaid

from:
MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

The function of play in childhood has been essentially misunderstood in the past. Surprising numbers of people still maintain that the primary function of play is to "let off steam" so that the child can return to the more important business of study and learning. Countless studies of how intelligence develops in children show that precisely the reverse is true—— that play is the way in which children develop intelligence. To put it simply, play is a child's way of learning.

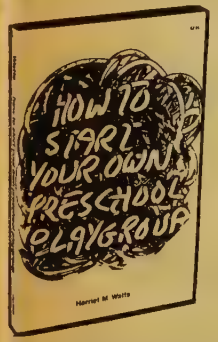
•

Children are immediately at ease amidst the "junk." Finding some order and harmony in piles of building materials and debris, they quickly set to work rearranging them to suit some elaborate and highly personal plan. Adults, on the other hand, seldom see anything more than confusion, chaos, and danger, despite assurances by experienced supervisors that these playgrounds are generally much safer than the ordinary ones because the children are constantly busy and alert and seldom need to resort to destructive types of play, a frequent cause of serious accidents. The message is as clear as the children know how to make it—— they want to create their own kind of order based on criteria quite different from those of adults. They want to design their own playgrounds.

How to Start Your Own Preschool Playgroup

Mothers of young children will find here delightful, commonsensical advice on solving one of their biggest problems: how to manage time for a job/studies/preservation of sanity, by providing child care that is affordable/reliable/beneficial to the child. Harriet Watts' answer is the organization of preschool playgroups of five or six children, with each mother supervising the group for one morning a week and having the other four weekday mornings free. She gives complete, nitty-gritty advice on legal, psychological and logistical concerns, with suggestions on how to get started, what equipment to have, what activities to plan, and how to make the experience a rewarding one for both children and mothers. A warm, practical book obviously written out of a desire to share personal experience, meeting a real need at a very moderate price.

—DH



How to Start Your Own Preschool Playgroup
Harriet M. Watts
1973; 153pp.
$2.95 postpaid
from:
Universe Books
381 Park Avenue South
New York, NY 10016
or Whole Earth

When casting about for members, you will have fewer problems if you are careful to limit the age span. The difference between a two-year-old and one age three is great, as any mother knows. A child of two will try to destroy what his three-year-old friend creates. He tires more easily and has a span of concentration of what seems like 30 seconds. In other words, put the two in the same pot and you can expect all sorts of toil and trouble to bubble up. The injection of a four-year-old might seem more successful, but I feel the older child tends to get cheated. His coordination and understanding are just that much more highly developed, and even if he does not show his boredom, his time would be more fruitfully spent with his peers. It is also extremely difficult for a mother to compensate for this difference with individual attention or separate projects. A group of three-year-olds can become one terrible tornado if neglected for any length of time.

ABOUT THE LOSS OF INNOCENCE

The summer of Camp Crap is coming to an end.

Captain Mediafreak wakes up early in the morning. He places his face close to Chocolate Graham's and synchronizes his breathing with hers.

At seven o'clock, he plugs in the television set. Last night they watched *Tomorrow*. Now he tunes in *Today*. He listens to the sound through a button in his ear so as not to wake Chocolate.

"In the Better Your Exit case," Barbara Walters is saying, "the witness who originally saw two men pouring gasoline on that first self-styled Kamikaze motorcyclist has disappeared.... The Dionysius Space Flight could possibly go out of orbit, according to— "

Captain Mediafreak switches from NBC to CBS.

"One of our astute film editors," Hughes Rudd is saying, "remembered seeing the face of Innocence before, and dug up this out-take from a Human Be-In— remember them?— at Golden Gate Park in San Francisco back in 1967."

"I'm a mutation," the frizzie-haired hippie with a diffraction disc on her forehead is saying. "That's all I know." White block lettering that reads *CHARLOTTE WOMANDAUGHTER* is superimposed across her chest. An interviewer's voice asks, "What do you mean, a mutation?" She answers, "Well, you know, if you were with the Bland Corporation, and you projected into the future all these young dropouts who are going around sniffing flowers instead of fighting with the military or going ape-(bleep) over every new kitchen appliance, you'd consider us like mutations. You'd write a report that said, 'Oh, this is a bad litter; we better poison the lot of 'em with strychnine before they spread.' " The interviewer's voice asks, "How do you feel about fraternizing with the enemy?" Charlotte grins and says, "Hey, there's a lot of suppressed poets and painters and musicians hiding under straight people. You shouldn't try to divide us. That's propaganda, man."

Captain Mediafreak notices that among the crowd in the background, Notary Sojak is pointing out Innocence to Primo Columbian....

Flashiebackie:

Captain Mediafreak's mother has come to visit him at the abandoned Times Square newsstand and meet his new roommate Tongue Fu.

"It will really be wonderful," she is saying, "for the two of you to get away from the city. It's so hot and muggy here in the summer. But won't you miss your television?"

"I'm thinking of taking the set with me on the plane," Captain Mediafreak says. "I'm gonna buy a ticket for it. We'll sit next to each other and fasten our seat-belts when the stewardess tells us to. And she'll serve it a TV Dinner."

His mother is sitting on an old stack of Ed Sanders' mimeographed *Fuck You: A Magazine of the Performing Arts*, sewing name tapes onto everything in sight— clothes, toothpaste tube, motion picture camera— when she asks Tongue Fu, "Isn't all this media stuff a contradiction of that philosophy of yours about not getting caught in the past?"

"The earth is a living organism. And the media are the nervous system of the earth. If the media are healthy, the earth is healthy. If the media are diseased, the earth is diseased."

"I reckon it's the old question," says Mrs. Mediafreak. "Which came first, the earth or the media?"

"Which came first," Tongue Fu asks in return. "You— or your nervous system?"

"Oh, I couldn't answer that," she says. "But you just just make sure my little Captain Stumpy writes to me from camp every day— so I'll know he's healthy, I don't care about the earth— just a postcard, is all I ask.... "

"Let's make a baby today," Rosebud Zwalyimeh says to Tongue Fu.

"We will do it on Coincidence Cliff."

"Where else? My favorite place in all of Camp Crap."

"The child shall choose its own name."

"Okay, but we'll call it Fun, at least until then. All I've ever really wanted to do was have Fun. And that name could fit either a girl or a boy."

"It could also be Japanese or American. Fun Fu. The name pleases me."

"No, not Fun Fu. Fun Zwalyimeh."

"Is it not the custom to give a child the name of the father?"

"I've figured that one out. The reason is, you always know who the mother is, but sometimes you can't be absolutely positive who the father is, so they give a baby the ostensible father's name because it'll imply he's definitely the father."

"I would like— to make a film record— on the development of Fun."

"Captain Mediafreak could film the birth in our home."

"Beyond birth," says Tongue Fu. "I would like to film— us, as we fuck today— for Fun to be able to witness its own conception."

"But we'll use the tripod. And put all the equipment out of the way behind the bushes. And have it prepared in advance. Then we'll take some MDA first."

And so they do.

They're kissing as they softly undress each other. Rosebud caresses Tongue Fu's outstretched tongue with her own, first the entire length of the underside, then along the top, spiralling around the matrix of papillae. And then, while she purses her lips over the tip, he begins to withdraw his tongue, slowly, bringing her closer and closer to him.

They seem to melt to the ground.

Rosebud is resting on her back, legs apart, knees in the air.

"I will respect your wish," Tongue Fu promises, "and never say— I love you— but I will always be thinking it."

Now he is gently separating the petals of her cunt with the swirls of his tongue, then ever so gradually slithering in deeper and deeper and deeper.

Suddenly Rosebud's body twitches.

"You sexist pig," she says.

And hits Tongue Fu on top of his head with a rock, knocking him unconscious.

She pulls his tongue out of her. Drags him to the edge of Coincidence Cliff, his head bleeding and his tongue still drooping from his mouth. Then she pushes him off the cliff. And then jumps off herself.

Over the public address system the Rolling Stones are singing *Wild Horses*. Captain Mediafreak is playing disc jockey again.

[Continued, page 723]

Deschooling Society

Very few parents look at teachers and schools with Illich's true understanding of their powerful influence within our society today. He gives a devastating analysis of the ways in which educational institutions act to minimize learning and maximize conformity and social stratification. When we look for positive moves, are Illich's solutions practical, or in fact real, given the current state of education? Deschooling Society *clarifies many of the problems, but if readers are anxiously looking for ready answers, they might be in trouble. Or is this what Illich meant to achieve? If so, he has done a right-on job.*

—Diane and Eddie Grayson

Deschooling Society
Ivan Illich
1970; 186pp.
$1.25 postpaid
from:
Harper & Row
General Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

We have come to realize that for most men the right to learn is curtailed by the obligation to attend school.

•

School initiates, too, the Myth of Unending Consumption. This modern myth is grounded in the belief that process inevitably produces something of value and, therefore, production necessarily produces demand. School teaches us that instruction produces learning. The existence of schools produces the demand for schooling. Once we have learned to need school, all our activities tend to take the shape of client relationships to other specialized institutions. Once the self-taught man or woman has been discredited, all nonprofessional activity is rendered suspect. In school we are taught that valuable learning is the result of attendance; that the value of learning increases with the amount of input; and, finally, that this value can be measured and documented by grades and certificates. In fact, learning is the human activity which least needs manipulation by others. Most learning is not the result of instruction. It is rather the result of unhampered participation in a meaningful setting. Most people learn best by being "with it," yet school makes them identify their personal, cognitive growth with elaborate planning and manipulation.

•

A much more radical approach would be to create a "bank" for skill exchange. Each citizen would be given a basic credit with which to acquire fundamental skills. Beyond that minimum, further credits would go to those who earned them by teaching, whether they served as models in organized skill centers or did so privately at home or on the playground. Only those who had taught others for an equivalent amount of time would have a claim on the time of more advanced teachers. An entirely new elite would be promoted, an elite of those who earned their education by sharing it.

No More Public School

A simple, informative guide for folks interested in setting up their own alternative programs. Includes information on curriculum, environment, finances, legal status, etc. Practical, rooted in experience, an invaluable aid to people who want to focus positive energy into building new programs; programs which are open and flexible, yet productive.

—Marcia Perlstein

No More Public School
(A Manual for Innovators)
Hal Bennett
1972; 137pp.
$2.95 postpaid
from:
Random House, Inc./
The Bookworks
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

You may feel that you're alone in your desire to make a school. Your friends, though sympathetic with your views, have no children of their own and so can't offer much more than moral support. So you need to get together with other parents like yourself. Here's what you can do:

Make a simple ad. It might go like this:

SCHOOL PROBLEMS?

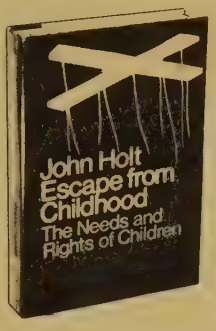
Parents. Teachers. Are you interested in a small private school for children from five to twelve years old? Low or no tuition? Relaxed, open classroom. Let's get together. (Your name, address, and telephone number.)

Escape from Childhood

In his latest book John Holt concentrates on the rights of children, and their effects on adults. He knows very well that "modern childhood is hard on adults as well as children, that it is as hard to raise a child as to be a child, and is getting harder all the time." The book examines childhood as an institution with its own rules, roles and psychological repercussions. The chapters on the ways adults see and threaten children (e.g., "love objects", needing "help", or being "cute") are outstanding. In schools, this adult attitude becomes even more demeaning and manipulative when children are treated as possessions—– my students, my class, my group.

Holt provides a readable concise overview of children's rights: voting, legal, sex, drugs, travel, financial, etc., and discusses steps that adults and children might take to secure those rights. He will surely anger those who feel that eight year olds are too young to determine their own destinies and that fourteen year olds cannot think for themselves. I would highly recommend the volume to the uninformed and to those who think they are informed.

—Woody Clark



Escape from Childhood
John Holt
1974; 286pp.
$7.95 postpaid
from:
E.P. Dutton & Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth

For many reasons children need a much larger network of people to relate to. The small family is so often unhelpful or destructive because it is so small. The relationships are too intense, too much is always at stake. Many parents find if hard to say no to their children even though they say it much too often, because it seems to threaten their ideal relationship with the child. They have to get angry before they can say no, and then they are doubly angry at the child for "making" them say no. The family is so dependent on these highpowered feelings, so shut in on itself, so non-involved with others or with the community, so devoid of purposes outside of itself, that it is fragile, easily threatened by a quarrel.

•

Almost all adults, men and women, use children as what we might call love objects. We think we have a right, or even a duty, to bestow on them "love," visible and tangible signs of affection, whenever we want, however we want, and whether they like it or not. In this we exploit them, use them for our purposes. This, more than anything else, is what we use children and childhood for—– to provide us with love objects. This is why we adults find children worth owning and the institution of childhood worth preserving, in spite of their great trouble and expense.

Flowers Can Even Bloom in Schools

Each article in Marcia Perlstein's edited volumn is short, concise, readable and very telling. The book is a real contribution to the growing literature on "humanistic-existential education". The overriding theme is summed up in a quotation from James S. Coleman: "Among the more general questions we need to ask is how it is that the young become adults?" In one way or another each author addresses this fundamental issue.

There are some problems with integrating all the material: the meld of humanist/existential philosophy with educational psychology/communication theory is elusive. This aside out of the way, anyone interested in educational reform would be advised to read Flowers. *It is an excellent catalyst for change in "schooling", with the potential of striking a responsive chord in any parent, administrator, teacher or student.*

—Woody Clark

Flowers Can Even Bloom in Schools
Marcia Perlstein, Ed.
1972; 204pp.
$6.00 postpaid
from:
Westinghouse Learning Press
770 Lucerne Way
Sunnyvale, CA 94086
or Whole Earth

Somewhere Else

For those who don't want to, or shouldn't go to college, this resource catalog lists and describes alternative learning places under two main divisions, centers and networks. Centers include such categories as alternative futures centers, media centers, spiritual centers, and social and political change centers. Under networks are listed learning exchanges, alternative vocations networks, overseas work/study network and much else. Women's centers and networks are also included. Most organizations are described in enough detail to get a good idea of how they operate. A rich and very diversified source of information for those interested in alternative places to be and learn.

—Sylvia Jacobs

Somewhere Else
(A Living-Learning Catalog)
Edited by Center for Curriculum Design
1973; 213pp.
$3.00 postpaid
from:
The Swallow Press, Inc.
1139 S. Wabash Ave.
Chicago, IL 60605
or Whole Earth

Kogo Studio/Gallery
32 Greene Street
New York, NY 10013
(212) 966-1408

KOGO STUDIO / GALLERY

Yoshiko Kogo, also a member of the New School faculty, runs a series of classes in her well-equipped studio/gallery in designing and printing fabrics by hand.

She teaches hand-painting, batik, tie-dye, and block printing on fabric. The classes are offered in monthly sessions beginning on the first Tuesday of each month. Tuition is $30 a month (four sessions, one day per week) including lab fee, excluding individual art supplies such as brushes and fabrics. The $5 registration fee enables you to take any set of classes as many times in a year as you wish without paying a registration fee each time.

•

Pacific High School's
Apprenticeship Service Program
12100 Skyline Blvd.
Los Gatos, CA 95030
(408) 867-2260

pacific high school's APPRENTICESHIP SERVICE PROGRAM

Carolyn Kaye, who founded ASP, says in a recent letter. "We want to help people from 14-18 years old find an alternative to learning in the conventional ways (schools). We want to help provide contact between apprentice and master, person and mentor, learner and teacher all over the country. When someone tells us what he/she would like to do, we will let them know if we know of any people who could help and/or try to find people. We will send the people we refer them to a copy of his/her letter of application. . . . It is up to the apprentice to get in touch with anyone we suggest if he thinks he would be interested in learning with any of them . . . . The arrangements are up to the two individuals.

". . . . We are primarily interested in situations where the apprentice can trade some work for learning, although in some cases the teacher may ask for a fee or money for supplies—– or the student may be able to do enough work that he should be paid. These are all things that the two should work out before starting and keep evaluating if necessary as they work together. If people want to be enrolled in school and working toward a high school diploma while they are doing an apprenticeship(s) the cost is $200. Reductions are available. For those who do not want to be enrolled the cost is $5, if we are instrumental in helping you find someone to work with."
Get in touch with Sarah G. Bernhardt or Dianna H. Teague. They have contacts with teachers and people in 29 states and Canada, so far.

The New Schools Exchange Newsletter

It must have been around 1969, when the country's alternative schools movement was peaking and people were drawing long on Holt, Kohl, et al that the New Schools Exchange Newsletter came into being and to this day it has kept the faith. Read just one issue and if you've become disappointed or jaded, you find yourself perking again, ideas streaming, sap rising. It's still got the spirit, but it's practical too, and has maintained three very useful sections: People (teachers seeking jobs), Places (schools seeking teachers, students) and Good Things (curriculum enrichments and tips on what's going on all over). A year's subscription includes a valuable annual directory of alternative schools. Once in awhile they throw in a bonus like the 1973 "Garden for All Guide to a Greener, Happier Community."

—Heidi Seney

The New Schools Exchange Newsletter
$10/yr (bi-monthly)
from:
New Schools Exchange
P.O. Box 820
St. Paris, OH 43072

Cream Rises
TEACHING

Deschooling Society *Subversive & salutary* 720

Piaget for Teachers *Theory in action* 394

How Children Learn *Acute pre-schooler perceptions* 394

The Open Classroom *Opening up the (school) system* 403

No More Public School *Alternative School blueprints* 720

Teaching As a Subversive Activity *Authority vs. inquiry learning* 394

Reading, How To *Insights, techniques, encouragement* 721

The Lives of Children *A real mind-opener* 395

Escape from Childhood *Kid lib groundrules* 720

How to Survive in Your Native Land *The way it is* 396

Experiments in Prayer *Lighthearted/ effective prayer routines* 721

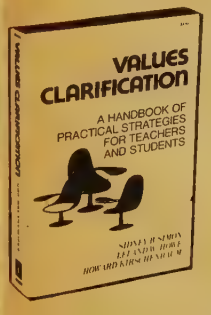
Values Clarification

Values clarification is a fairly recent addition to the teacher's toolbox—— it hasn't yet been hyped up into a super-fad. Its concern is not for the content of people's values, but for the process of valuing. The goal is to put students in touch with their own thoughts and their own feelings, so that they can build their own conscious value system.

This book lays out 79 values clarification strategies for use at all grade levels. Some strategies are done in small groups, others in pairs, still others individually. Emphasis is on developing personal and group trust. Some of the strategies are:

Values Voting
Who's to Blame?
The Fall-out Shelter Problem
The Interview Whip and the Interview Chain
Who Comes to Your House?
The Pie of Life
Resent-Demand-Appreciate

—Betty Moss

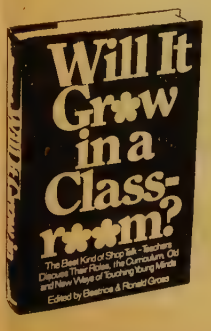


Values Clarification
(A Handbook of Practical Strategies for Teachers and Students)
Sidney B. Simon, Leland W. Howe, Howard Kirschenbaum
1972; 379pp.
$3.95 postpaid
from:
Hart Publishing Co., Inc.
719 Broadway
New York, NY 10003
or Whole Earth

Will It Grow In A Classroom?

This collection of articles by teachers who are still doing it gives practical suggestions for classroom survival that enables one to continue turning on to teaching. Making abundant use of excerpts from progressive educational newsletters and articles, the editors share the thoughts of folks who treasure joy in learning situations, whose classroom descriptions retain an informal openness rather than jargon and "educationese", and who aren't afraid to make practical specific suggestions written in the context of their own experiences, written not as recipes but more as guideposts.

—Marcia Perlstein



Will It Grow In A Classroom?
Ed. by Beatrice & Ronald Gross
1974; 316pp.
$2.95 postpaid
from:
Dell Pub. Co., Inc.
1 Dag Hammarskjold Plaza
245 E. 47th St.
New York, NY 10017
or Whole Earth

Edcentric

Published by a non-profit collective-corporation, in cooperation with the United States National Student Association, this journal tells it like it is about such things as: discrimination in the schools against Chicano children, America's continuing involvement in Vietnam, the problems and promise emerging from open classrooms, and teaching working-class history. This is a down to earth periodical, concerned with real and pressing problems. Contains not just articles, but third world poetry, resource directories, and perspectives on problems from the bottom up. The Center is dedicated to radical educational change, and Edcentric *is a truth-speaker in that cause.*

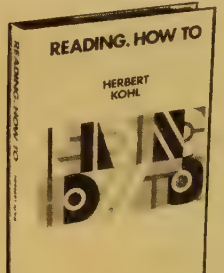
—Sylvia Jacobs

Edcentric
(A Journal of Educational Change)
$6/6-issue, individuals
$10/6-issue, institutions
from:
Center for Educational Change
P.O. Box 10085
Eugene, OR 97401

Reading, How To

Herb Kohl knows reading can be taught by non-professionals (yes, us) on the streets, at home, in school; that there is no reading problem—— there are problem teachers and problem schools. One human being can help another read if he values reading, is interested in sharing his skill, has some understanding of the process, gathers a few materials, and can operate with trust and patience. Besides proposing this theory, Kohl includes over 100 pages of reading strategies—— word and sound games, writing ideas, high interest books, ways to make reading materials. This is the encouraging testimony of an educator who never "met a young person who didn't want to read."

—Betty Moss



Reading, How to
Herbert Kohl
1973; 216pp.
$1.95 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Most people who fail to learn how to read in our society are victims of a fiercely competitive system of training that requires failure. If talking and walking were taught in most schools we might end up with as many mutes and cripples as we now have non-readers. However, learning to read is no more difficult than learning to walk or talk. The skill can be acquired in a natural and informal manner and in a variety of settings ranging from school to home to the streets. The conditions for natural learning are minimal and certainly not mystical or technically complex. Reduced to basics the following are sufficient to enable people to acquire the skill of reading as well as develop the ability to perfect that skill:

1. a person who knows how to read and is interested in sharing that skill, and who has
2. a nonelitist, noncompetitive attitude toward sharing knowledge and information as well as
3. some understanding of the process of learning to read and
4. a belief that reading is an important human activity that the young should master;
5. pencils or pens, writing surfaces and printed material if possible;
6. a context for learning in which learners feel secure enough to make mistakes and ask questions;
7. respect for the culture and mind of the learner and therefore an ability to understand and use what the student brings to the situation; and finally
8. patience, a sense that there is time to learn.

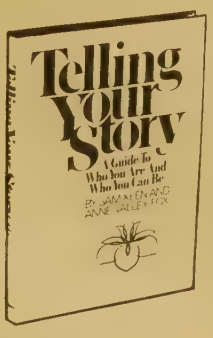
There are two more conditions that apply specifically to the learner who should have

9. the ability to use some language as well as reasonably intact senses and
10. a desire to read or at least curiosity about reading.

Telling Your Story

This book helps us look at ourselves in a way which celebrates our uniquenesses and enables us to share experiences with others. By using a few simple suggestions, we readers can become participants in viewing our own pasts, presents and dreams.

—Marcia Perlstein



Telling Your Story
(A Guide to Who You Are and Who You Can Be)
Sam Keen and Anne Valley Fox
1973; 153pp.
$6.95 postpaid
from:
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, LI, NY 11530
or Whole Earth

VIEWPOINTS

The pleasure we get from suffering is one of our most carefully guarded secrets. We like to deny the pay-offs of pain. Like Prometheus, we blame the gods and ignore our complicity in creating our fate. See what happens when you reverse your story and take total responsibility for your sorrows.

* In what ways do you repeat (year after year) patterns that are frustrating to you? Describe the circles.
* Imagine yourself at your worst. How do you use this weak, suffering, helpless self to get your way with other persons? (Do you collect nobility points for constant striving? Martyr points for doing distasteful duty? Poor-little-me points for being sick?)
* Tell about the sorrowful, tragic battles of your soul in a way that will make your audience laugh instead of cry.

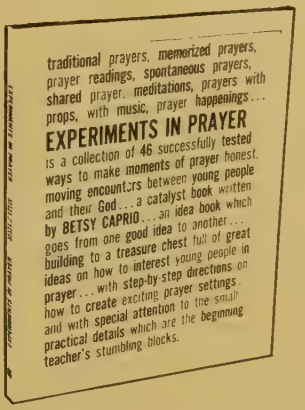
Here are some clues to help you reverse your story.

* Sick people are powerful. They make the healthy feel guilty.
* The fears of the weak and fragile establish the limits of any relationship. The meek inherit the earth by sapping the energies of the bold.
* Victims enjoy the luxury of saying, "I can't." When you were young you got punished if you said, "I won't," and helped if you said, " I can't."

Experiments in Prayer

A manual, complete with experiments, suggested props, and spaces for results, for the teaching of prayer. Written by a teacher of religion, this book gives dozens of ways to make prayer an exciting, contemporary, personal and powerful experience. She is hip to kids, hip to what a drag prayer usually is and full of ideas to wake the spirit that sleeps even in the worst of us. These experiments range from fairly straight suggestions to some ideas that would attack even the most jaded of experimental palates (try her Superstar prayer or her Jungle meditation). Her soon-to-be-published sequel More Experiments in Prayer *is more transpersonal and draws more heavily from non-Christian sources.*

—Jim Fadiman



Experiments in Prayer
Betsy Caprio
1973; 189pp.
$2.95 postpaid
from:
Ave Maria Press
Notre Dame, IN 46556

No law was ever handed down from Mount Sinai, or anywhere else, saying that man, in talking to God, has to suddenly stiffen up as though he had swallowed an Easter candle.

LEARNING

Zephyrus

Dear Friends

Let me suggest a coevolution game called Zephyrus. Zephyrus collects ideas from teachers some parents & a few kids. These ideas are then printed in large primers. Yes, these ideas are sometimes akward. Suggest untried ventures. But they work in exciting ways because they are the creation of the meddlers that use them.

I wanted to send you a review of a Z Primer but its hard when fellow teachers keep borrowing & never returning the goods. Perhaps thats the best & only recommendation.

At one time I had 8 Zephyrus Primers. This is my last one. If you can hold on to it I think you'll see a coevolution game at work.

Sincerely
Misty Applegate
Cole Valley S.F.

Deschool Primer

A series of workbooks, play-books, information-books for children, each **Deschool Primer** *contains games, themes, lots of illustrations, and lots of information about almost everything you can think of. An enormous amount of territory is covered in these large size childrens play and think manuals. Suitable for use in classrooms or at home, prices vary from $1.50 to $3.50.*

Deschool Primer No. 6: *is a scrapbook on how to solve problems, women's theater, a visit to China, ideas for a child care center, and a learning faire.*

Deschool Primer No. 9: *contains, among much else, lesson plans on How to Program an Inchworm; Being a Sentence; The Family Game; Sun Printing, and lots more strange holds for learning.*

—Sylvia Jacobs

Deschool Primer
Published by Zephyrus, a non-profit collaborative of San Francisco, Bay Area, teachers, parents, toymakers, and friends.

from:
Zephyrus
1201 Stanyan St.
San Francisco, CA 94117

INVENT:
some things that need inventing:

a means of transportation that does not pollute the air, can be available for public and private use, is inexpensive.

a community playground apparatus that will not cause injury, will be enjoyable, and will teach the use of numbers.

a new language.

something that will keep you warm in the winter, cool in the summer and is portable.

a self defense mechanism.

a way for people to become involved with, and directly responsible for, the decisions that affect their city.

•

Essence/Essence 2; Environmental Studies Cards

A set of multi-colored cards with eye catching designs and a raft of ideas for intriguing projects/experiments—— a real springboard for action learning. They are especially fine for use in joint science/humanistic studies, and there are few good learning aids in this category. The Environmental Studies project (sponsored by the American Geological Institute and supported by the National Science Foundation) drew on the experience of many teachers who wanted materials that would open up class situations and stimulate curiosity, inquiry and trust. They turned out the real article.

—Betty Moss

Essence/Essence 2; Environmental Studies Cards

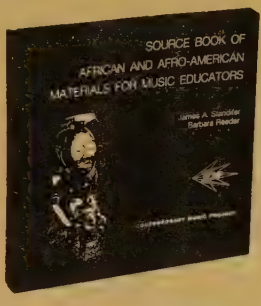
Environmental Studies Project
1971-72; 16pp. and 24pp. supplementary booklets
write for information

from:
Addison-Wesley Pub. Co. Inc.
2725 Sand Hill Road
Menlo Park, CA 94025

Source Book of African & Afro-American Materials for Music Educators

Really helpful for anybody approaching a traditional cultural discipline & wondering about how things are/should be structured. They're attentive & sensitive teachers—— Have a list of dozens of other titles.

—Richard Greene

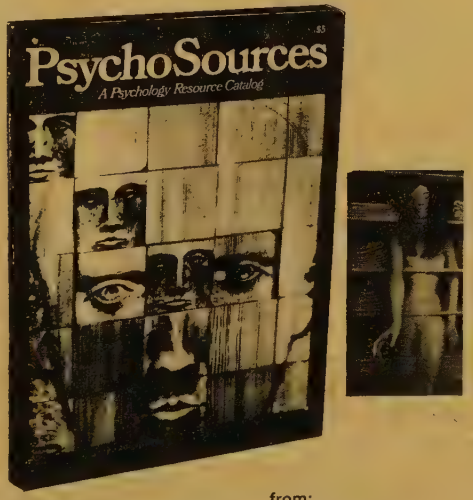


Source Book of African & Afro-American Materials for Music Educators
James A. Standifer and Barbara Reeder
1972; 147pp.
$3.50 postpaid
from:
MENC Publication Sales
1201 Sixteenth St. N.W.
Washington, D.C. 20036

Psycho Sources

Whole Earth *in format, designed for a large lay readership as well as professionals desirous of new perspectives, "apologists and critics, the students and those who are studied", this handbook pulls together a variety of thematic sources from a number of disciplines to inform and expand our notions about psychology. It makes no pretenses about having answers but does try to present books, films, ideas which may provide springboards for views of ourselves and others in the contemporary psycho-social scene.*

—Marcia Perlstein



Psycho Sources
By the editors of CRM, Inc.
1973; 215pp.
$5.00 postpaid

from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

The most versatile simulation game on the market, **Starpower** generates data from the group that combines its focus on the use of power with the particular concerns brought by individual players.

—Georgeann Wilcoxson

Starpower. Simile II, P.O. Box 1023, La Jolla, CA 92037. Instructions $3.00; student kit $25.00.

Cream Rises
TEACHING MATERIALS

Zephyrus Primers *In-touch-putting texts* **722**
Seed Catalog *Super idea bag for teachers* **723**
Metaphorical Way of Learning & Knowing *Learning tips & trips* **397**
Essence/Essence 2 *Colorful & lively teaching aids* **722**
Thinking Straight *Bullshit litmus* **393**
Looking and Seeing *Perceiving, judging, changing your world* **370**
Catalog of Free Teaching Materials *Effective school/tool freebies* **398**

The Source

The Source *is published by a small group of committed people, and their product is a very high quality one. At a very low price, they offer resource workbooks, activity manuals, and poster sets designed to stimulate inquiry, analysis and original thinking in students. Workbooks are crammed with visuals and quotes from original sources, games to play and things to think about—— in an attention-getting format designed to attract and hold concentration. Activity manuals concentrate on involving students in concept games illustrating the principles of government from many perspectives. Audio-visual materials are also available.*

A partial list of titles includes:

Workbooks:
The President Vs. the Congress: An examination of the centuries-long struggle between the executive branch (colonial governors as well as presidents) and the legislative body.

John Stuart Mill—— What is Liberty? The classic liberal argument for individual liberty, with emphasis on liberty of expression. Why society thrives when there is liberty, the appeal to self-interest, and the common good.

Technology and Social Change: How technology brings on social change by changing the total environment and the values which form the basis of social institutions. Toward understanding the impact of technology, and developing means of coping with technological change.

Activity Manuals:
The Environment: A series of activities intended to stimulate students to evaluate the many facets of the environment beyond the obvious physical aspects.

Democracy: A series of activities designed to explore the ramifications of participatory democracy and representative government, majority rule, and individual responsibility.

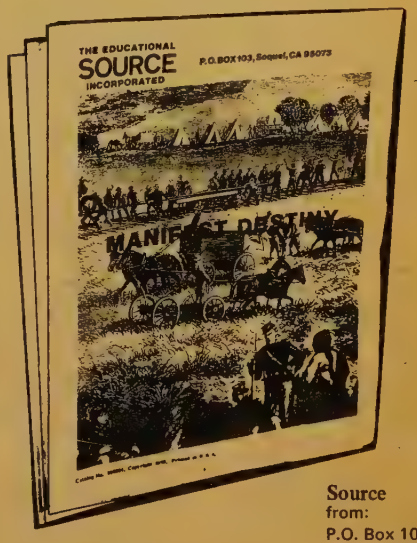
Audio-Visuals: (each contains two filmstrips, one tape cassette, and a complete teacher's manual)
What Does the Civil War Mean to Us Today?
The Populist Party, Its Rise and Fall
What Did the Depression do to People?

Poster Sets: (20 posters per set)
The Hundred Days: The first 3 months of the New Deal. Headlines and political cartoons showing varied reactions to the measures of Franklin D. Roosevelt.
The Industrial Revolution: The impact of the factory system on Europe, the raw material for a dozen revolutions, Marxism, and fascism. Cartoons, illustrations, posters

Prices are low, considering what you get:

A sampler set of resource workbooks, 10 different titles, for $10.00; $7.50 if you prepay.
Sets of 10 of one title, $10.00 postpaid
Sets of 30 of one title, $25.95 postpaid.
Poster sets, $2.00 per set.
Activity Manuals, $2.50 per set, or $1.75 ea. for 10 or more.
Audio-Visual Programs, $15.00 ea., postpaid.
These are excellent materials in all respects.

—Sylvia Jacobs



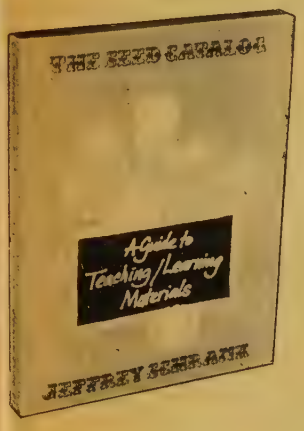
Source
from:
P.O. Box 103
Soquel, CA 95073

The Seed Catalog

Aimed at high school and adult learners, this resource guide covers publications, organizations, periodicals, audio, film, video, games, multi-media materials, and there is even a section on "devices", covering such items as domes, harpsichord kits, alternative computer groups, etc., etc.

Whatever you're looking for, or curious about, you can probably locate it somewhere in **The Seed Catalog.** *Combines professional and non-professional resource materials and groups, mainstream and off-beat kinds of publications and organizations—— a super-survey of what's available, and where.*

—Sylvia Jacobs



The Seed Catalog
(A Guide to Teaching/Learning Materials
Jeffrey Schrank
1974; 374pp.
$5.95 postpaid
from:
Beacon Press
25 Beacon St.
Boston, MA 02108
or Whole Earth

The Seed Catalog is by all means biased and opinionated. The materials included are more likely to be comparatively inexpensive rather than a $300 learning package. The materials are biased toward high school and adult learners, since they have been more neglected in educational reform than younger children. The catalog is prejudiced in favor of the humanities and the communication arts with special emphasis on media education.

It is biased in favor of provocative, creative, and controversial material and tends to neglect the standard and schoolish.

•

Future Planning Maps. . . are designed as a series of learning activities for small groups. Each "map" is a single sheet of paper that folds out to poster size and has about four activities for a small group. For example, the one on "Tomorrow's Society?" outlines the basic features of a capitalist society, a welfare society and a socialist society and asks the group to make a majority decision on which they would want to live in. Another activity asks each student to redistribute the federal budget money for the second half of the decade and an another suggests that students "design an improved society."

Maps are available on the topics of "Constructing a Life Philosophy," "Ecology," "Constructing a Political Philosophy," "Prisons" and "Foreign Policy." Each costs $.95 from Greenhaven Press, Box 831, Anoka, MN 55303.

•

Creative Publications

This is the best wish book for learners and teachers of mathematics. Traditional math lab materials plus new stuff created by Creative.

It's all there—— experimental books, pattern blocks, number blocks, measuring devices, Geo-Rings (TM), polyhedra models and the incredible circle-master compass.

—Bob Albrecht

Catalog Free
from:
Creative Publications
P.O. Box 10328
Palo Alto, CA 94303

National Commission on Resources for Youth, Inc.

The NCRY serves as an information clearinghouse for youth participation projects where young people perform significant activities in media, medical service, counseling, the sciences, language arts, etc. As initators of innovation and a provocative source of ideas, the following Commission publications are highly recommended:

Youth into Adult *(Mildred McCloskey with Peter Kleinbard, 1974; 209pp., $2.50) Reviews nine youth-oriented projects (from over 800 catalogued) throughout the United States; outlines the key elements for the type of project that facilitates the transition of youth to adulthood. The projects chosen for description show a heavy concentration on drugs and encounter methods to overcome this "youth problem." Commission publications have a strong "helping" and "service" orientation directed at "troubled youth."*

Resources for Youth—— *a free quarterly newsletter that describes current high school age youth projects.*

40 Projects by Groups of Kids *(1973; 109pp.; $2.00). Brief summaries of youth-developed projects, telling how the projects got started and how they function. Despite a bit of paternalistic bent, the Commission has assembled some noteworthy examples of programs for youth. The presentations are clear & concise. The availability of this "resource clearinghouse" provides a great service to all those interested in youth.*

—Woody Clark

National Commission on Resources for Youth
36 West 44th St.
New York, NY 10036

Helping a doctor test a child for lead-poisoning

EDU

Comprehension of the possible uses of computers in education is still minimal, and the state of the art relatively primitive. **EDU** *is a journal trying to increase the awareness of educators and to furnish resource materials on computer-based instruction for all levels—— elementary school through university. It serves as an exchange for new ideas, and fervently solicits contributions from its readers (for pay!). In its Summer 1974 issue the announcement was made that* **EDU** *will be provided free as "part of our continually expanding service to the educational community." Far out!* *(More on computers: Pg. 724)*

—DH

EDU
free to the educational community
from:
Educational Products Group
Digital Equipment Corp.
Maynard, MA
01754

ROSEBUD'S SUICIDE NOTE

Tongue Fu regains consciousness. He makes his way toward Rosebud's broken body. She is dead.

The poignant sound of Joan Baez singing *Villa Lobos* is heard across Camp Crap as Tongue Fu struggles up the steep cliff, carrying Rosebud under one arm, and grasping foliage for support alternately with his other hand and his tongue.

When he reaches the top, he starts to gather their clothing and finds a handwritten note in Rosebud's pocket. Although his vision is blurred, he manages to read it.

Before I take my own life, I'm going to kill Tongue Fu, the man who thought he was my lover, but who is in reality a symbol of Japanese imperialism.

They take our oil.
They take our lumber.
They take our whales.
And what do they give in return?
Pollution of the air.
Pollution of the water.
And pollution of the mind.
They flood America with radios, televisions, phonographs.
They are buying up our land.
And they are sneaking in their anti-Christ religion.
You'd think those lousy Japs had won the war the way they're acting.
I'm filled with despair when I see what they are doing to the ecology.
But through the grace of Better Your Exit I'm leaving behind a ray of hope by taking one of them with me.

—BYE Communication #3

P.S. Enclosed please find one mysterious Oriental ear, the BYE's calling card, to help you hear us crystal clear.

Tongue Fu finds the ear in her pocket. He walks to the edge of Coincidence Cliff, prepares to jump, changes his mind and comes back. He starts to write a note, but stops. Instead, he kneels beside Rosebud, in front of the bush behind which he had placed the motion picture equipment.

"I will speak my suicide note on film. It is difficult to know where to begin. For I would never have known Rosebud— if I had not known Chocolate Graham. I would never have known Chocolate— if I had not known.... "

Flashiebackie:

At the police station, Tongue Fu hangs up the telephone.

Buff Mogul, the theater manager he was arrested with at *Deep Throat*, is scratching his sideburn with excitement.

Back in their cell, he asks, "Hey, was that your real tongue you dialed the number with or just a novelty item?"

"It is my real tongue."

"Do you realize what a fantastic film we could make about you? I can get Sam Peckerpal to direct. My attorney, Albert Morse Code, is coming here to bail us out. I'll have him draw up a contract."

"I am not an actor."

"You wouldn't have to act. Just play yourself. That's what we all do anyway. Hey, listen, I don't go around every day offering to back a full-budget flick on the spur of the moment, but you've got a unique box-office attraction there."

"I do not wish to exploit my tongue."

"Lemme see it again, huh?... "

Flashiebackie within Flashiebackie:

"You must always remember," Say When Daddy is telling young Tongue Fu, "that whether your gift of tongue is to be a curse or a blessing depends on how skillfully you learn to manipulate it. Only after you have thoroughly mastered the art of liberation will you be able to flow with the commerce of exploitation which is the other side of that coin along whose ridged edge you wish to roll through life. All right, Anteater, you may put your tongue back in your mouth now.... "

"That," says Buff Mogul, "is one helluva tongue. You better put it back inside before I flip out. Listen— exploit, shmexploit— you'd be able to reach an awful lot of people."

Tongue Fu is still prostrate beside Rosebud's body while Bob Dylan is wailing *It's All Over Now, Baby Blue*. On the line, "Take what you have gathered from coincidence," he hears a buzzing and looks up in the sky. A squadron of jet bombers is flying by in OM formation.

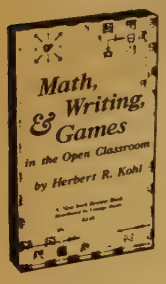
[Continued, page 737]

Math, Writing & Games

Herbert Kohl has taken two taboo subjects, math and writing, and provided student and teacher, as well as reader, with some real choices. Kohl shares some of his own learning experiences and the give-and-take between himself and his students. His math and games techniques can be used by any who have the courage to try new tools—— who believe that learning can be fun.

In order to teach, one must be able to learn. I have heard many teachers say this, but few have the real understanding to practice what they preach. For Herb Kohl, learning is a "family affair" and the family is anyone who would like to learn. This book goes far beyond math and writing games; I would recommend it for parents as well as teachers.

—Eddie Grayson



Math, Writing & Games
(In the Open Classroom)
Herbert R. Kohl
1974; 252pp.
$2.45 postpaid
from:
Vintage Books
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

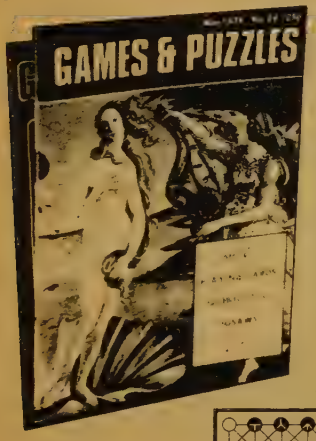
For example, setting up a game and then playing it involves continual experimentation with the rules. Often problem situations arise which were not originally expected and therefore the rules have to be modified. Some games turn out to be boring. Others involve a simple strategy which once known guarantees one of the players a win, making the game uninteresting once the strategy has been uncovered.

Exploring a game and then modifying its rules has many similarities with the way theories are constructed in the sciences and social sciences. A theory is generally created to explain or provide a model of some phenomenon. Then the theory is explored. Experiments are performed to see if it is adequate; modifications are made; the consistency of the theory is examined. Scientific work often depends on playing with rules, and play with games can be good practice in scientific thinking for young people. Creating and playing a game is one way to become familiar with an unfamiliar idea and to understand some of the nuances of life systems.

Games & Puzzles

Oh, I do like this magazine. It has descriptions of games, strategies for playing, evaluations, reviews, teeth-gnashing puzzles, and reports on matches & tournaments. . . the entire spectrum of games—— card games, board games, simulation games, commercial games, games invented thousands of years ago, games invented yesterday.

—Bob Albrecht



Games & Puzzles
$9.00/yr. surface
$16.50/yr. air
from:
Circulation Manager
Games & Puzzles
19 Broadlands Rd.
P.O. Box 4
London N/ 4DF
England

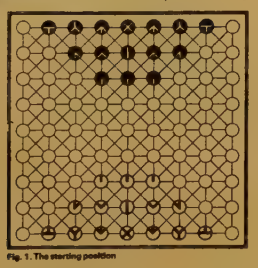


Fig. 1. The starting position

Ploy is a battle game for two players, or four players playing separately or in pairs. Like chess, each army consists of pieces varying in power called in Ploy the Commander, whose capture decides the game, Lances, Probes and Shields. (The game is also decided if one player loses all his pieces *except* his Commander.) The originality of Ploy is this: a piece may be played *either* by moving it in the direction of one of the lines marked on the piece, (see Fig. 1) *or* rotating it on its space, so that it has a different choice of directions in which to move at a later turn.

Cream Rises

GAMES

Math, Writing and Games in the Open Classroom *Inventive, perceptive (tender) reaching* 724

Games & Puzzles *Both delights and instructs* 724

Hand Game *Indian mind-war* 385

Serious Games *Simulations/games how-to* 724

Mathematics—— A Human Endeavor *The joy of math* 392

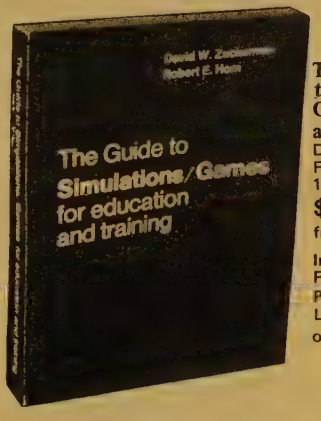
WFF 'N PROOF *Logic-learning fun & games* 389

Children's Games in Street and Playground *Real games* 384

The Guide to Simulations/Games for Education and Training

This volume is both an introduction to simulation techniques and a catalogue of over 600 simulations, most of which are commercially available. These simulations range all the way from mock nuclear warfare to simulated conflict at an urban high school. Basically simulations are a form of theater. They provide models or simplifications of situations involving conflict. The simulation sets up a scenario and it is open to the actors to play out the situation according to the resources and rules they are presented with. There is a heavy emphasis in this book (and I suspect in the field of simulations itself) on how to maximize power while minimizing conflict. Some of the simulations try to deal with pollution, or mathematical problem solving, or cooperative behavior, but the heavy emphasis is on the management of economic and political systems. This is both a fascinating introduction to the area of simulations and a guided tour (sometimes a bit frightening) through the uncertain ways people in this culture have developed to deal indirectly with conflict.

—Herbert Kohl

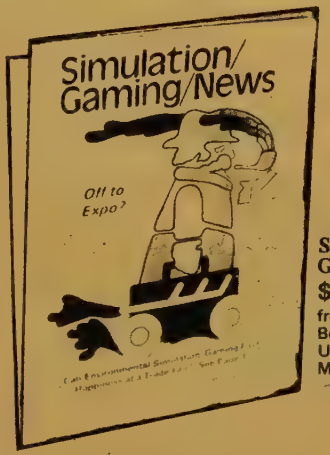


The Guide to Simulations/ Games for Education and Training
David W. Zuckerman and Robert E. Horn
1973; 501pp.
$15.00 postpaid
from:
Information Resources, Inc.
P.O. Box 417
Lexington, MA 02173
or Whole Earth

Simulation/Gaming/News

Simulation/Gaming/News *provides valuable annotations, criticisms, and ideas for people already familiar with many simulation games, though it might be a bit bewildering for novices. It provides information about new simulations and about simulation conferences; it suggests ways to rework unsuccessful games or create new ones. Most game journals appeal to behavior manipulators. This one is an exception and treats simulations in humanistic, and playful ways. It is worth looking at.*

—Herbert Kohl



Simulation/ Gaming/News
$4.00/yr. (five issues)
from:
Box 3039
University Station
Moscow, ID 83843

Serious Games

In 1965 Clark Abt brought together a group of young engineers and academics, to pursue non-military social problems via computer simulation techniques. (He thereby also managed to indulge, in business, his life-long interest in scientific problem-solving applied to human conflicts.) Abt Associates has since devised many games for educational, vocational, government and industry use in unraveling complex social tangles. Serious Games *outlines some of these, with commentary on how to design games, how to use them in school settings, and how to evaluate their effectiveness. It should open up lots of routes to more interesting classroom instruction, as experiment and play replace the traditional text/teacher scene.*

—DH

Serious Games
Clark C. Abt
1970; 176pp.
$1.95 postpaid
from:
The Viking Press, Inc.
625 Madison Avenue
New York, NY 10022
or Whole Earth

My Computer Likes Me. . . when I speak in BASIC

If you have never used a computer and have an opportunity to use one with BASIC (a computer language), but don't know how, My Computer Likes Me. . . when I speak in BASIC *may be the answer. Short, printed on newsprint, designed to be used once and given to a friend (or recycled), this book has become a favorite in schools to introduce students and teachers alike to the fundamentals of programming a computer in BASIC.* *(See also Pg.* **704***)*

—Jean Danver

My Computer Likes Me. . . when I speak in BASIC
Dymax
1972; 63pp.
$1.19 postpaid
from:
Dymax
P.O. Box 310
Menlo Park, CA 94025
or Whole Earth

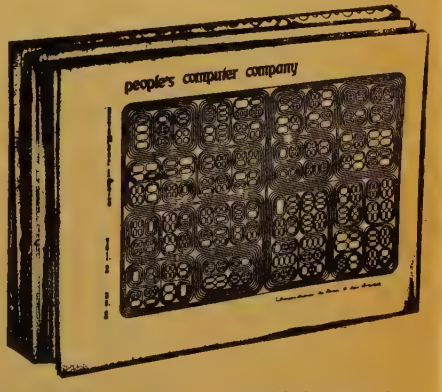
People's Computer Company

People's Computer Company (PCC) is a non-profit group dedicated to forwarding use of interactive computers in the education of young people (6-15 years). They primarily emphasize the use of education games for use both with and without computers.

PCC operates out of a storefront in Menlo Park, CA. Part of that storefront is equipped with games and computer terminals. This area is available for class visits and also to anyone interested who happens to walk in (a small fee is charged for computer use). In fact, one of the best ways to get acquainted is to drop in on one of their night-time activities.

In addition to the storefront, PCC runs a publishing operation, the primary product of which is a funky newspaper named appropriately, People's Computer Company. *This newspaper, put out five or more times yearly ($4 subscription) contains lots of not always accurate, but often fun information on computers in education. There is news on computer vendors, what other people are doing, listings of programs, book reviews and letters from the newspaper's numerous admirers.* *Also see Pg.* **704***.*

—Jean Danver

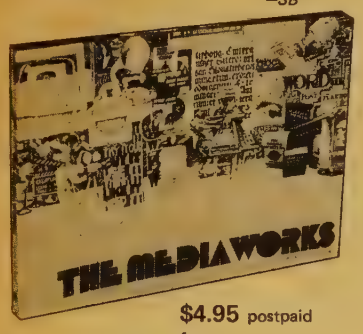


People's Computer Co.
$4 /yr (5 or more issues)
from:
People's Computer Co.
1919 Menalto Ave.
Menlo Park, CA 94025
(415) 323-6117

The Media Works

Not bad. It's like a field trip with the high school journalism class through the idea of media. The workrooms of every media form you can think of—— replete with concrete information and revelations. A nice avenue out of being strictly a passive media consumer. (Another: turn off the machine, tune out; drop in on. . . friends. Bushes. Stars.)

—SB



The Media Works
Joan Valdes and
Jeanne Crow
1973; 282pp.

$4.95 postpaid
from:
Pflaum/Standard
38 W. Fifth St.
Dayton, OH 45402
or Whole Earth

Create:

Get the Sunday comics and create your own comic strip, using the pictures but not the dialogue of one (or more) of the regular Sunday features. Use only the frames you need; change the sequence if you wish; add characters from other strips (Mary Worth in Snoopy's dog house?!); change the character's image (a *hip* Dick Tracy?!); borrow some noise words from other pages; add a frame or two of your own, if necessary—— in short, create an original comic effect out of second-hand materials. Pay attention to the expressions on the characters' faces when assigning them dialogue.

•

Do:

How much advertising are you exposed to each day? Keep an advertising "journal" for just one day. You'll be surprised at just how many selling messages are thrown at you!

- How much of each TV hour is spent on commercials?
- How much of each radio hour is spent on commercial messages?
- What percentage of the daily newspaper is comprised of ads? Of any given magazine?
- Count the number of billboards you encounter on a typical route, driving from home to school, for example. (Although this would not be the best route to use, since billboards are placed for working men and women to see.)

Here is a number that will surprise you: Count the number of *other* selling messages (not those transmitted by the preceding media) you are exposed to each day. Begin with the labels on your toothpaste and your breakfast food, and continue counting until bedtime. Don't overlook anything—— like matchbook covers, for instance. The number should come out to about 300. You don't believe it? Count 'em!

The Camera Cookbook

Since most elementary schools do not have a darkroom readily available for use by students, basic photography is rarely incorporated into the elementary curriculum. This book helps to change that by providing information on how to offer a unit on basic photography without special plumbing, enlargers, or a darkroom and still get all the benefits from such a program. *(Also see Pg. 680)*

—John Liu-Klein
[Suggested by Jean Marzollo]

The Camera Cookbook
1970; 20pp.
$3.50 postpaid
from:
Workshop for Learning
Things, Inc.
5 Bridge St.
P.O. Box 321
Watertown, MA 02172

Cream Rises
MEDIA

Media Works *Decoding the medium's message* 725
Making It Move *Animation basics* 725
Moviemaking Illustrated *Learning film from the funnies* 725
Media and Methods *Resourceful teachers' current guide* 397
Film Making in Schools *Introductory film turn-on* 401
NICEM *Audio-visual access for schools* 399

Moviemaking Illustrated

Approaching the dissection of filmmaking initially appears ridiculously simple. You point a camera at the action as it begins and turn it off when it ends. Initially, this is how films were made and the product showed it. Today's films provoke highly complex emotional and visual reactions, due to all the fascinating techniques incorporated. This book, using comic strips to illustrate these techniques, dissects filmmaking into concrete methods used to achieve a visual end and provides new insight to the movie goer as to how films are made. Contents include the variety of shots available. How editing effects the product and use of sound and actors. Highly informative book.

—John Liu-Klein
[Suggested by Peter Maher]

Moviemaking Illustrated
(The comicbook filmbook)
James Morrow and
Murray Suid
1973; 150pp.

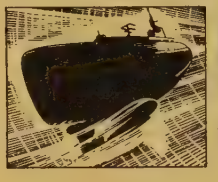
$3.95 postpaid
from:
Hayden Book Co., Inc.
50 Essex St.
Rochelle Park, NJ 07662
or Whole Earth

RELATIONSHIP

The magic of film editing is that it can create ideas and impressions not conveyed by the individual shots viewed in isolation.

Relational Cutting

Relational cutting brings together people, places, and things that may never have had any connection in actuality. An example is a cut from the outside of a real submarine to a set that looks like a sub's interior. The cut gives the impression that we are now inside that particular sub.



Films Kids Like

This book is a listing of a few hundred films that the editors of this book have found that kids like, the result of a project whose purpose was both to show good films to kids as well as to document their reactions. *(Also see Pg. 693.)*

—John Liu-Klein

Films Kids Like
(A Catalog of Short Films
for Children)
Compiled and edited by
Susan Rice
1973; 150pp.

$4.95 postpaid
from:
American Library Assoc.
50 E. Huron St.
Chicago, IL 60611
or Whole Earth

Making It Move

Although elementary and secondary schools are not known for rapid change, the intrusion of filmmaking courses into the curriculum has partially been held up due to lack of qualified instructors or the unavailability of pertinent texts on the subject. Making it Move *provides a student text as well as an instructors manual, both of which are highly informational as well as organized into teachable fashion. Units in the book emphasize animation and employ techniques other than those which require the use of a camera to obtain this goal, such as drawing on leader or scratching unprocessed film. One unit includes the construction of a zoetrope.*

—John Liu-Klein

Making It Move
John Trojanski and
Louis Rockwood
1973; 151pp.

$3.00 postpaid
from:
Pflaum/Standard
38 W. 5th St.
Dayton, OH 45402
or Whole Earth

And be sure to shoot from a tripod, always keeping the camera as steady as possible.

Late in the afternoon, shoot one frame of the setting sun every five minutes. Your film, when it is projected, will show a sunset occurring in only a few seconds.

It is impossible to suggest all the ways you can pixillate people and distort motion. These few ideas will, hopefully, get you started. Your own creativity will surely provide for you and your friends some highly imaginative and creative pixillations and motion-distorted animations.

Media Mix

Jeff Schrank of The Seed Catalog *also edits this journal of visual resources for learning. It carries critiques of new films (especially documentary, instructional, and short films), as well as reviews of books on cinematography and use of media in the schools. Also picks up on simulations/games, tapes, video, and slides & filmstrips—— good tips for aware teachers.*

—DH

Media Mix
$5.00/yr. (eight issues)
from:
221 West Madison St.
Chicago, IL 60606

Home Born Baby. . . . is a cinema verite film about an at-home natural childbirth. The film was made by the parents and is narrated by them and the midwife nurse. The parents made **Home Born Baby** because they wanted a visual record of such a profound event and because they wanted to be able to show their child its own birth someday—— a mind-boggling concept in this age of rediscovering roots.

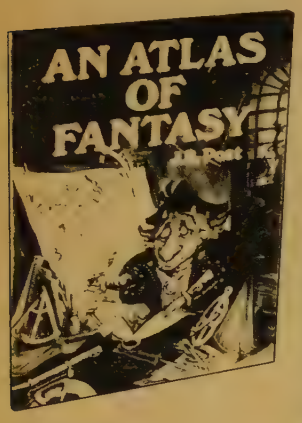
There undoubtedly are high school students (or even whole classes) not yet ready for such a graphic film. But for those who can benefit from the power, the beauty and an explicit depiction of human birth will find **Home Born Baby** unforgettable.

45 min., b&w, rental a stiff $60, sale $350 (also in ½-inch videotape for $25 rental and $175 sale) from the mother, Sally Pugh, 389 Ethel Avenue, Mill Valley, CA 94941. (415) 388-9094.

An Atlas of Fantasy

This is one of those bulls-eye ideas that makes you wonder why no one thought of it before—— a collection of the maps of magical lands from literary fantasy. Here is the geography of the imagination: Oz and Ouroboros, Schlaraffenlande and Poictesme, Toad Hall and Lilliput and Narnia, Mongo and Middle-earth, Islandia and Pellucidar and Prydain. These names, these drawings, have a power of evocation that is deeply mysterious—— we have seen these cities, climbed these ranges, sailed these seas. Thanks to J. B. Post for assembling the maps & charts that made these worlds so real—— the cartography of magic.

—DH



An Atlas of Fantasy
J. B. Post
1973; 283pp.
$12.00 postpaid

from:
The Mirage Press, Ltd.
P.O. Box 7687
Baltimore, MD 21207
or Whole Earth

Vast miniatures

My contribution is to mention something that you overlooked in the "educational-games-war-games" section. Which is the vast miniature figure manufacturing people who make figures from 5-15-25-54 MM in size for wargaming and collecting, ancients to modern figures, Science Fiction & Fantasy Figures for the massive mind boggling Lord of the Rings wargame.

The figures are always a fine cast sculpture and a piece of artwork in the least, and when painted are fantastic—— I, myself have an 8,000 figure Napoleonic wargame army alone——and paint figures for commission on the side.

The wargaming process with miniature figures is more satisfying than the board games and much more personal—— I find that the miniature wargamer is much more pacific caracture than his board comrade who uses impersonal counters.

Mindbogling catalogs can be had from:
The most extensive and varied everything:

The Soldier Shop, Inc.
1013 Madison Ave.
New York, NY 10021
Catalog $2.00

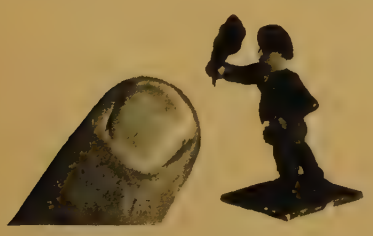
Old subscription rate 4-quarterly catalogs $4/1 yr extensive selection:

Miniature Figurines USA, Inc
4311 Lemmon Ave
Dallas, Texas 75219
catalog $1.25

Good selection:

Miniature Figurines Ltd.
Box P
Pine Plain, NY 12567
catalog $1.25

Best Regards,
Michael Gilbert
Master of Space & Time
22 Koster Blvd. 5a
Edison, NJ 08817

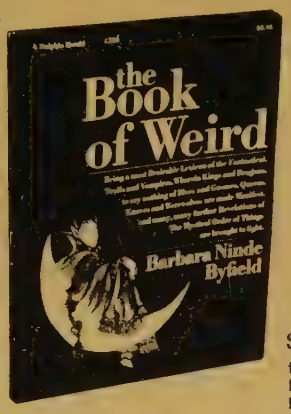


a troll——
(L. of the Rings) Inclosed,
in this scale Hobbits are that tall

The Book of Weird

A delightful compendium of illustrations and information about things medieval, mystical and/or magical—— a glossary of elves and earls, knaves and gnomes, sorceresses and warlocks, trolls, vampires, werewolves, dragons, and other creatures of great interest. Marvelous drawings—— a "most desirable lexicon of the fantastical," indeed.

—DH



The Book of Weird
Barbara Ninde Byfield
1967; 160pp.

$3.95 postpaid
from:
Dolphin Herald
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

Crones and Hags

Crone: An old woman, wrinkled, bent, with gnarled hands, few teeth, and a high-pitched cackle. She is generally found in a chimney corner and may be helpful to you in a way you least expect.

Hag: Beware. A Hag, who if she resembles a Crone otherwise will still have kept a few more teeth, is of an unpleasant and evil intent. She is sometimes fond of the company of one or two other Hags.

INTERNATIONAL SCI-FI/ FANTASY BOOKSTORE LIST

by Laura Besserman

Space Age Books Pty, Ltd.
317 Swanston St. Melbourne
Victoria 3000 Australia
(03) 663-1777

Futuropolis
130, Rue du Theatre
Paris XV France
734-41-92

Skull Bookshop
Rue du Germoir 6
B 1050 Brussels Belgium
472-585

Bakka
286 Queen Street West
Toronto 28 Ontario Canada
(416) 595-1161

Science Fiction Shop
56 Eighth Ave.
New York, NY 10014
(212) 741-0270

Dark They Were & Golden Eye
10 Berwick Street
London WIV 3 RG England
(01) 734-4260

A Change of Hobbit
1371 Westwood Blvd.
Los Angeles, CA 90024
(213) 473-2873

Ferret Fantasy, Ltd.
27 Beechcroft Rd.
Upper Tooting
London SW 17 England
(01) 767-0029

La Mandragore
30 Rue des Grands Augustins
75006 Paris, France
033-04-84

TIME TRIPPING

by Diana L. Parson

TIME TRAVEL—— The Current Middle Ages and other legal trips. . .

Tripping implies escape to another reality. Besides drugs or travel there is another way to get away from it all. Here are some organizations that aid and abet travel in other worlds—— past, future, or imaginary.

THE PAST

The Society for Creative Anachronism, Inc., home of the Current Middle Ages.

Have you always wanted to be a knight in shining armor, or his lady? Would you like to learn calligraphy, embroidery, falconry, heraldry, heroic poetry, mead brewing, pavannes and galliards and a reason to do them? These are only a few of the things taking place in the Society for Creative Anachronism, which has branches all over the country. By means of events such as tournaments and revels which attempt to recreate a medieval environment, by classes, workshops, and demonstrations, Society members pursue the goal of theoretical and practical research into the culture of the Middle Ages.

The Society's national offices are located in Berkeley, California. Branches are organized along medieval lines. There are presently four kingdoms, each ruled by a king chosen periodically by combat with wooden replicas of medieval arms, as well as dependent principalities, baronies, cantons, and shires.

Membership in the Society entitles one to receive regular publications, including the kingdom newsletters, which contain announcements of the nature and location of all events in the region, and also the magazine **Tournaments Illuminated**, which features How-to and research articles, reviews, etc. Membership is currently $4.00 a year. Write: The Society for Creative Anachronism, Inc., Box 1162, Berkeley, CA 94701.

IMAGINARY WORLDS

The Mythopoeic Society

Tolkien lives! In the wake of the incredible popularity of **The Lord of the Rings**, organizations for lovers of fantasy have sprung up like mushrooms.

The most flourishing of these is the Mythopoeic Society, which is devoted to the study, discussion, and enjoyment of myth, fantasy, and imaginative literature, especially the works of J.R.R. Tolkien, C.S. Lewis, and Charles Williams. These authors furnish an excellent introduction to the entire realm of imaginative literature, but since the Society has a general interest in fantasy and myth, it is concerned with many other writers as well, and in a greater understanding and integration of all aspects of human experience, as well as greater individual and group creativity.

The Mythopoeic Society presently includes over twenty-five branches in various parts of the country. Members may attend monthly meetings to discuss fantasy works or themes, hold seasonal picnics and revels, read and/or contribute to Society publications, and attend the convention (Mythcon, held in the Los Angeles area each August).

Those interested in the Mythopoeic Society may receive a sample copy of the newsletter, **Mythprint**. Annual dues are $6.00, and include the newsletter. The Society also publishes a magazine, **Mythlore**, at irregular intervals. Write: The Mythopoeic Society, Box 4671, Whittier, CA 90607.

The Fantasy Association

This group exists to promote the study of fantasy, imaginative literature, medieval literature, and related areas. The Association operates entirely through its publications, the newsletter, **Fantasiae** features articles by well known fantasy writers, reviews, lists of newly published works of interest, and scholarly articles on a variety of themes and works. It is also beautifully illustrated. One free sample copy available on request. 12 issues, $4.00. Write: The Fantasy Association, P.O. Box 24560, Los Angeles, CA 90024.

THE FUTURE

Fandom

F.I.A.W.O.L....F.I.J.A.G.H...(Fandom is a way of life...Fandom is just a goddam hobby)

It's not an organization, having neither officers nor members. Perhaps "phenomenon" is a better way of describing it. But whatever it is, since science fiction aficionados first began forming groups in the 1930's, fandom has existed, and a complex network of clubs, amateur magazines (called "fanzines"), and conventions are covered by that heading today.

What its participants have in common is an interest in environments other than our own. In particular, they delight in extrapolating, imaginating, and discussing, reading and writing about fantasy and science fiction, and in the discovery that they are not alone.

Science fiction fan clubs may be found in most major U.S. cities and many foreign countries, and publishers of amateur magazines devoted to articles on various aspects of science, science fiction, and almost anything else from Gilbert and Sullivan to organic gardening may be found anywhere. All of these people come together at the conventions which are held regularly and irregularly here and sometimes abroad.

The major convention is the Worldcon, held on the Labor Day weekend at a location which rotates each year. Each region of the country also has its annual "con." such as the Westercon (West Coast, 4th of July weekend), Boskone (Boston in March), Disclave (Washington D.C., Memorial Day Weekend), Lunacon (New York, Easter), Midwestcon (June), and Philcon (Philadelphia, November). Conventions devoted to Star Trek and other special interests are also held from time to time.

Science Fiction clubs usually meet weekly, and feature speakers—— pro writers, scientific experts, etc., and discussions. Conventions feature the same, with the addition of panels, a banquet, costume ball, SF and fantasy art show, displays, parties, etc.

The closest thing to a coordinating organization for fandom that exists is the N3F (National Fantasy Fan Federation), which is a sort of volunteer clearinghouse and source of information on conventions, clubs, rare books, tapes and speakers etc.

For information, write: The National Fantasy Fan Federation c/o Janie Lamb, Rt. 1, Box 3664, Heiskell, TN 37754.

Another way of getting into fandom is to subscribe to one of the fanzines. Some of the more notable are described below:

Yandro

Published irregularly by Robert and Juanita Coulson, Rt. 3, Hartford City, Indiana 47348, this is a good example of a "fanzine" – a publication which in addition to articles on science, science fiction and fandom, includes personal ramblings, book reviews, etc. The tone is low-key and friendly, and the 'zine provides a good introduction to the best of the fannish culture. (1 issue, 50 cents, 4- $1.80, 12- $5.00)

Cream Rises
NATURE

Golden Handbooks Life Science Library *Science/nature learning best bets* 373, 389, 729

Audubon & Natural History *Outstanding nature journals* 374

Patterns of Survival *Top intro to evolution theory* 375

Gazelle Boy *Wisdom from a wild child* 728

Standard Handbook for Telescope Making *A to Z of telescopes* 730

All About Telescopes *How to build cheap and well* 377

Only a Little Planet *Beautiful portrait of spaceship earth* 727

City Leaves, City Trees *Urban tree-watching lore* 731

Things Maps Don't Tell Us *Geology turn-on* 378

Color Star Atlas *Comprehensive star guide* 730

Pioneer Life *Fascinating frontier history* 729

Only a Little Planet

What a relief, to find exquisite, delicate city as well as country photos. The story line wraps it all together: a man involved in city-nature (each cat, each tree becomes a powerful source of animated life) turns to country-nature (each forest, every discovery re-enforces a new belief in diversity and planet love). Both city and country receive tender homage.

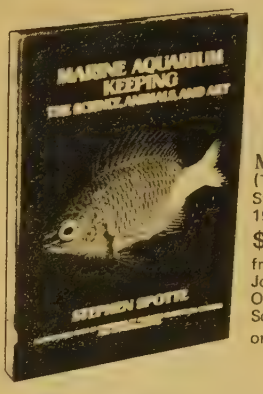
—PW

Only a Little Planet
David Brower, Lawrence Collins and Martin Schweitzer
128pp.
$4.95 postpaid
from:
Friends of the Earth
Ballantine Books
457 Hahn Road
Westminster, MD 21157
or Whole Earth

Marine Aquarium Keeping

For the more ambitious aquarium keeper and student of marine life, this book comprehensively covers scientific, technical aspects of aquaria and their ecology. The price is a bit steep, but the information on equipping and maintaining aquaria, choosing & caring for the fish, and creating an attractive marine environment, is detailed and complete. Format and illustrations are excellent—— if you are a serious aquarium hobbyist, or plan to be, this could be a worthwhile investment.

—DH



Marine Aquarium Keeping
(The Science, Animals, and Art)
Stephen Spotte
1973; 171pp.
$9.95 postpaid
from:
John Wiley & Sons
One Wiley Drive
Somerset, NJ 08873
or Whole Earth

How to Acclimate New Animals.

1. Open each bag after it has been put into the tank and drop an airstone into it. The oxygen content must not be allowed to decline nor the amount of carbon dioxide to increase. Mild aeration prevents both from happening.

2. Float the bags for at least an hour. Every 15 minutes or so add a little tank water to each bag. This gradually gets the fishes used to differences in chemical content.

3. When the water temperatures in the bags and in the tank have been the same for at least 30 minutes, gently tip the bags and let the animals swim out. Do not turn the bags upside down and pour the specimens into the tank because such a technique creates needless stress.

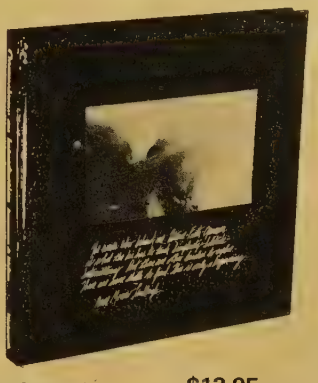
4. Keep the lights dimmed for the rest of the day. If the animals show signs of having adjusted before the day is out, try giving them a very light feeding.

Oceanology: An Introduction

This is a book with which one can learn and dream about the sea at the same time. The authors clearly understand that man's experience with the ocean is not limited to measurable data; Melville, Conrad, Whitman, Joyce, all saw the same sea with different eyes. Their quotations give this book a special dimension which few science books have ever achieved. Science is not a prerequisite; all the reader needs is curiosity and an inquiring mind.

Where do waves come from? Why do many beaches change drastically from summer to winter? How can animals and plants survive in the ever-pounding surf? Can the ocean survive man? How can we save the whales? What does the darkness cover in the deeper parts of the sea? How were the continents formed? These and many other questions are answered in a style which is always clear and concise, never condescending. The book benefits tremendously from a strong emphasis on visual materials, with many excellent photographs and drawings. The spectrum of subjects ranges through the physical, chemical and biological factors of the oceans, but in addition, environmental problems are interwoven throughout. The authors are clearly pessimistic about the future of the oceans, but they see hope in education. Their own book is an excellent first step for anyone to learn about the sea.

—John Vollmer

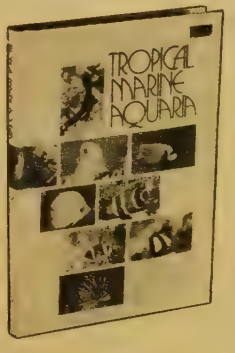


Oceanology: An Introduction
D. E. Ingmanson and W.J. Wallace
1973; 327pp.
$12.95 postpaid
from:
Wadsworth Publishing Co., Inc.
Belmont, CA 94002
or Whole Earth

Tropical Marine Aquaria

This is a tender, loving, poetical view of tropical fish, those spectacularly beautiful coral reef dwellers. In each brief description of a fish, the author manages to convey not only information but a picture of personal friendship with each. The details for organizing a proper setting are aesthetic as well as practical in nature. All illustrations are in splendid color.

—Heidi Seney



Red Clownfish

Tropical Marine Aquaria
Graham F. Cox
1972; 160pp.
$5.95 postpaid
from:
Grosset & Dunlap, Inc.
51 Madison Ave.
New York, NY 10010
or Whole Earth

The Frail Ocean

The oceanic tell-it-like-it-is. Hard-hitting portrait of beach turned waterfront, oceans tainted red, buried estuaries, hard-pressed whales and subdivided military seas. Face it: the frail ocean. Described with hurricane force.

—PW

The Frail Ocean
Wesley Marx
1967; 274pp.
$ .95 postpaid
from:
Sierra Club
Ballantine Books, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Within a few decades it is estimated that the world will be faced with the disposal of one thousand tons of high-level-waste fission products annually. The Western Pacific Ocean is vast, deep, and sparsely populated by man; it affords a good test of the ultimate limit to the ocean's ability to handle such waste products. In the U.S. atom bomb tests in 1954 mixed fission products on the order of a half ton were introduced into the upper layer of the Western Pacific within a short time. "That this was near the limit of safety is evidenced by the capture in adjacent areas of specimens of tunas and other fishes with sufficient radioactivity to be doubtful for human consumption," observes Dr. Schaefer. The term "adjacent areas" encompasses one million square miles. The same fear served to prohibit natives of the Rongelap Islands from enjoying coconut crabs, their favorite staple. The prohibition remained in effect for five years while American food shipments subsidized the Rongelap diet. The Western Pacific thus had trouble handling a mere scrap of the world's future annual radioactive wasteload. The bottomless dump is daily becoming more and more of an illusion.

Locus

"The newspaper of the science fiction field" is produced approximately twice a month by Dena and Charlie Brown, Box 3938, San Francisco, CA 94119. If you want to know how many science fiction titles a given publisher put out last year, or what will be in the next issue of Fantasy and Science Fiction, this is the place to look. Locus also covers news of writers, conventions and other matters of interest to the writer or serious fan. Rates are $6.00 for 18 issues.

Amra

This is the 'zine for fans of sword and sorcery. Published irregularly, from Box 8243, Philadelphia, PA 19101, it features articles on the works of such writers as Robert E. Howard, Edgar Rice Burroughs and other creators of mighty-thewed battlers against nameless evils. It is professional in quality, including the artwork. Issues are 50 cents each.

WAR

by Steve Perrin

WARGAMING—— Battle, Murder, and Sudden Death on Hexagonal Squares.

If you've a yen to toy with a field marshal's baton, the fate of nations depending on your next maneuver, you might try Simulations Wargaming.

Wargames (basically chess taken back to its roots of moving toy soldiers or markers around on a board representing terrain) can be played on an infinity of levels, stimulating an infinite variety of conditions. Beginners can get pieces and setting from a publisher such as Simulations Publications, Inc., whose list includes DIPLOMACY (juggle the destiny of nations in 1914 Europe), or SNIPER (lead a squad through house-to-house fighting in France). Other "games" in their catalogue range from Ancient Greece to Viet-Nam.

Minimum players for a wargame number two, although games have been played with a dozen or so on each side (players, that is—— the pieces can run to whole armies). There are many clubs, ranging from an aggressive proselytizing organization like SPARTAN INTERNATIONAL to simple monthly gatherings. Large clubs will often sponsor conventions as well, where games and discussions of games go on forever. On the other hand some people simply meet with a friend once a week in a garage (you've got to have enough space to move the pieces around) far from the outside world. The one-to-one of a wargame is far easier to deal with than the one-against-the-world of modern living.

So find a friend, connect with one of the addresses below, and go on the ultimate ego trip. As one veteran observes, "There's no feeling in the world like knowing you've just crushed your best friend."

The primary publisher of wargames is

Simulations Publications, Inc.
44 East 23rd St.
New York, NY 10010

Ask for their catalogue.

For information on clubs and excellent articles on the subject, try

Wargamers Digest
P.O. Box 5526
Madison, WI 53705

For information on the fascinating world of naval wargaming, subscribe to the ALNAVCO LOG, $5.00 a year from:

ALNAVCO Incorporated
Box 9
Belle Haven, Virginia 23306

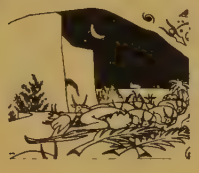
LEARNING

Gazelle-Boy

This is the chronicle of a young Basque writer's encounter in the Spanish Sahara with a gazelle herd which sheltered a little nomad boy. The tale of the wild child is one of the most enduring human legends—— as J.C. Armen says, it is not always a myth. To read Armen's poetic account of this experience, with his maps and evocative drawings, is to enter a privileged, mystical world where the human and the natural come together in "purity and freedom." A lovely, head-clearing book.

—DH

Gazelle-Boy
Jean-Claude Armen
1974; 127pp.
$5.95 postpaid
from:
Universe Books
381 Park Ave. S.
New York, NY 10016
or Whole Earth



Living in closer and closer proximity to the child, even during the deepest hours of the night, I have another surprise: I see him suddenly upright, his neck stretched and chin jutting forward, strangely immobile—— he is staring with large, ecstatic eyes at the full moon.

A moment later (following what signal?), he is off towards the horizon with great silent and elastic bounds, into the illuminated void of the night.

•

As the sun appears once again between the high stone towers, the child and the herd move off into the first rays, like a beginning of the world, an airy shadow bathed in red-gold, the gazelles in rose-gold.

Later, I see him swaying again, then dancing with wild leaps and capers among his scattered gazelles, his expression more ecstatic than ever; he gives frenzied but almost inaudible little cries, the timbre of which unmistakably reveals extreme joy.

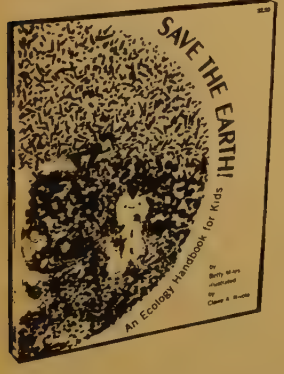
A climax is reached as all the joy, all the jubilant colours of the dawn, and the great organ drone of the sands (the dawn 'song' of the desert, of electrostatic origin), finally draw from the boy the ghost of a smile, gone in a flash.

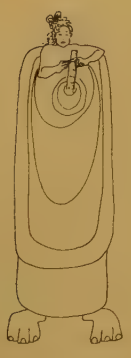
Save the Earth!

This book looks like a lot of books these days (nice line drawings) and has a familiar message (save the earth), but it has one major contribution: it tells kids exactly how to get action. As in: "Writing Letters in Your Own Town," "Writing Letters to Washington," "Making a Tape Recording," "Writing a Newspaper Story," "Starting a Block Association," "Working for Ecology on the Street" and "Holding a Press Conference." In other words, it's not enough to stop letting the water run when you brush your teeth.

—Heidi Seney

Save the Earth!
(An Ecology Handbook for Kids)
Betty Miles
1974; 96pp.
$2.50 postpaid
from:
Alfred A. Knopf, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth





Bath or Shower? A 5-minute project

Which uses more water, a bath or a shower?

To find out, plug up the tub drain and take a shower.

Is the shower water you caught in the tub as deep as the baths you usually run?

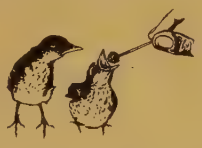
Care of the Wild, Feathered and Furred

The time-tested techniques and practical suggestions. My survival rate soared after discovering this handbook. The writing is easy and grass-roots.

—PW

Care of the Wild, Feathered and Furred
(A Guide to Wildlife Handling and Care)
Mae Hickman and Maxine Guy
1973, 143pp.
$3.95 postpaid
from:
Unity Press
P.O. Box 1037
Santa Cruz, CA. 95061
or Whole Earth

A baby squirrel raised in captivity can be very susceptible to colds. Never bathe the animal. Do not use cedar shavings sold in local pet shops for hamster and mouse cages as they may cause a coating of cedar dust to settle on the animal, clogging the nostrils and causing discomfort. If it is necessary to clean him, use tissues with a bit of baby oil or white petroleum jelly. Never use cotton. Cotton may leave moisture, adding to the danger of pneumonia.

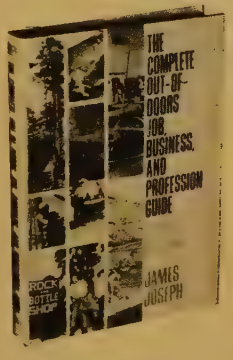


The first and most important step when you have a fledgling brought to you is to warm the bird as soon as possible. Nestlings, out of their nests and exposed to the elements, are highly vulnerable to death by pneumonia and need special care until they recuperate. Use a hot water bottle or heating pad (turned on low) or, if you do not have either of these, jars of hot water will do. Plastic bottles that hold liquid detergents and shampoos make excellent hot water bottles. Otherwise use glass jars. Fasten the lids tightly, wrap them in paper and snuggle the tiny birds in a nest of facial tissue directly against the jars. I suggest using two jars, one on either side of the bird, to supply more even heat to the body. The bird will benefit more from the heat if the nest is put directly on top of a padded hot water bottle or heating pad. The heating pad is really preferable to either the hot water bottle or glass jars since the latter will become cool and have to be refilled, while the heating pad will supply an even heat for as long as it is needed.

The Complete Out-of-Doors Job, Business, and Profession Guide

How to make a living in commercial *enterprises as opposed to the subsistence or welfare approach. Included are motel ownership, equipment rentals, forestry, county extension work—— a total of 50 areas. The tone won't appeal to purists (Chapter 7 is entitled "Cash in on Campers") but the information looks good and well thought-out. Sources and short bibliographies for each area, along with qualifications, work description, and outlook. Not exactly the ideal of right-livelihood in all cases, but it's solid information.*

—Richard Greene



The Complete Out-of-Doors Job, Business, and Profession Guide
James Joseph
1974; 275pp.
$10.00 postpaid
from:
Henry Regnery Co.
114 W. Illinois St.
Chicago, IL 60610
or Whole Earth

Competition is keen for conservation officer careers. California appoints only about 15 new fish and game wardens annually. The 25 game management officer trainees selected for each of Texas's two annual trainee classes are picked from more than 500 applicants. Recently, Pennsylvania selected a relative handful of applicants from more than 1,000 who sought niches as game protectors. Competition for higher paying federal game management officer berths is just as fierce. The states and federal government will continue to add to their game protector force but in dribbles and dabs. Only highly qualified applicants can hope to wear the badge of warden.

For more information write:

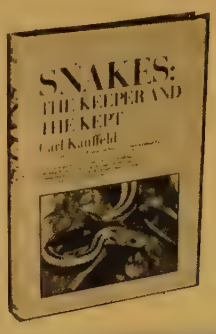
Your State's Fish and Game Commission

Bureau of Sport Fisheries and Wildlife
U.S. Department of Interior
18th and C Streets N.W.
Washington, D.C. 20240

Snakes: The Keeper and the Kept

I'm not big on pets but, if you're going snake hunting and want to make the captive a domestic friend, this book provides all the lowdown necessary to bring 'em back and keep 'em alive. Lots of hunt 'um stories.

—PW



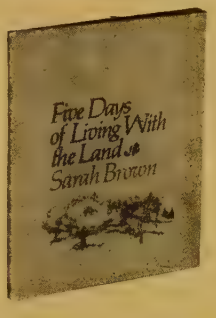
Snakes: The Keeper and the Kept
Carl Kauffeld
1969; 248pp.
$6.95 postpaid
from:
Doubleday & Co., Inc.
501 Franklin Ave.
Garden City, L.I., NY
11530
or Whole Earth

A weathered cedar log, a hiding box covered with cedar bark, peat moss, and pine needles covering the floor produce a rustic effect pleasing to both the snakes and the keeper. Note the sliding framed-glass panel door.

Five Days of Living With the Land

This is probably the first survival book that includes anti-acid pills in its equipment list. It's by a 15-year-old girl about her five-day stay in the woods by herself. She was extremely well organized (and well read), protected by a Great Dane and not far from help, but her discoveries are worth reading. Two young girls I know liked it a lot.

—Heidi Seney



Five Days of Living With the Land
Sarah Brown
1972; 48pp.
$4.25 postpaid
from:
Addison-Wesley Publishing Co., Inc.
Reading, MA 01867
or Whole Earth

Wednesday, August 12, 1970

I'm not going to eat for the rest of the afternoon—— that way I'll be good and hungry tonight.

Here is a *fantastic* dinner recipe:

1. Boil milkweed pods and leaves in *slightly* salted water for several minutes, then change the water and boil for several more minutes. Drain.
2. Slice several apples *almost* all the way through, put sugar between the sections, wrap in aluminum foil, and bake in the coals.
3. Boil sassafras roots and stems for about one-half hour. Drain off resulting tea.
4. Place grasshoppers on a stick, and hold them in the flames for about a minute, until they're dark brown and crisp.
5. Sugar blueberries lightly. Then eat!

•

Thursday, August 13, 1970

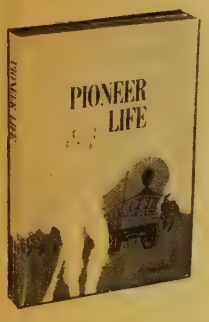
11:00 P.M. I don't know why I awoke but I can't fall asleep again. The stars are very bright tonight. Stars are happy things—— winking and dancing in the sky and getting tangled up in the trees. They're friendly companions, too, at times like this.

It's funny about the night—— the darkness used to be a hiding place for strange, threatening sounds. My first night in here was *really* frightening. But now the night is like a blanket of peace—— even more silent than the day. But it's not a resting peace—— I'm very aware now that life continues at night, because I'm in the middle of it. Flying squirrels glide and play in the trees; white-footed mice scamper through the leaves looking for seeds; owls slip silently through the shadows, listening for the rustle of leaves that means dinner. The woods are very alive and very wonderful at night.

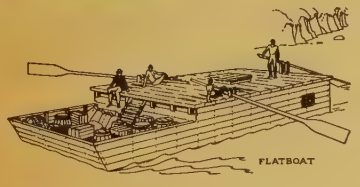
Pioneer Life in Western Pennsylvania

The cover on this paperback bears the title: "Pioneer Life" and it's only in the title page that you discover the rest of the title: "in Western Pennsylvania," but that's not particularly misleading. While there are references to that particular part of the country, the beautiful prose and engaging line drawings in the margins have a universal appeal. Pioneering in western Pennsylvania was not much different from pioneering elsewhere: clearing land, raising cabins, farming, hunting, marrying, birthing and dying. But here the details are fascinating and history becomes wonderfully readable.

—Heidi Seney



Pioneer Life in Western Pennsylvania
J. E. Wright, Doris S. Corbett
1940; 251pp.
$2.25 postpaid
from:
University of Pittsburgh Press
127 N. Bellefield Ave.
Pittsburgh, PA 15260
or Whole Earth



Seldom did such a day end without some hatchet-faced braggart, pock-marked and huge-fisted, leaping from the crowd to a stump and bellowing his challenge. Perhaps he had spent some months boating from Brownsville to Pittsburgh or on down the Ohio to Wheeling, and in the rough river company had gathered their picturesque lingo. Hungry for a good rough-and-tumble and conscious perhaps of the power of such lingo to astonish his hearers, he indulged in it now in his challenge:

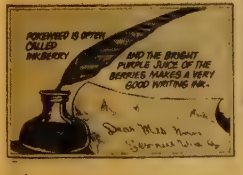
"I'm a Salt River roarer! I'm a ring-tailed squealer! I'm a reg'lar screamer from the ol' Massassip'! WHOOP! I'm the very infant that refused his milk before its eyes were open, and called out for a bottle of old rye! I love the women an' I'm chockful o' fight! I'm half wild horse and half cock-eyed alligator and the rest o' me is crooked snags an' red-hot snappin' turtle. I can hit like fourth-proof lightnin' an' every lick I make in the woods lets in an acre o' sunshine. I can out-run, out-jump, out-shoot, out-brag, out-drink, an' out-fight, rough-an'-tumble, no holts barred, ary man on both sides the river from Pittsburgh to New Orleans an' back ag'in to St. Louiee. Come on, you flatters, you bargers, you milk-white mechanics, an' see how tough I am to chaw! I ain't had a fight for two days an' I'm spilein' for exercise. Cock-a-doodle-doo!"

Good Earth Almanac

Sunday-funnies-style presentation of natural living projects for kids. Cheap, adventurous, and they work. Wild food, gardening, camp cooking, candle-making, bird-feeding, food-drying, weather, and ethics.

—SB

Good Earth Almanac
Mark Gregory
1971, 1973; 111pp.
$3.95 postpaid
from:
Grosset & Dunlap
51 Madison Ave.
New York, NY.
10010
or Whole Earth

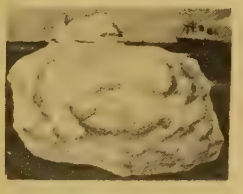


Golden Handbooks

Again high marks to Golden Press (Pg. 373) for their Nature, Science & Field Guides, and Golden Handbooks. They continue to publish inexpensive, well designed, accurate and fascinating introductions to all sorts of inviting subject areas. Recent additions to their booklist include Ecology, Horses, Oceanography, Kites, Exotic Plants, *and* Casino Games. *At $1.95, these are creme de la creme.*

—DH

Golden Handbooks
$1.95 postpaid
from:
Golden Press Division
Western Publishing Co., Inc.
1220 Mound Ave.
Racine, WI 53404
or Whole Earth



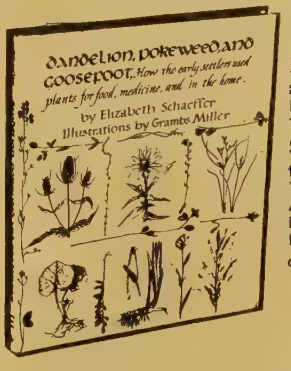
A typical iceberg in Antarctic is tabular or flat-topped, broken from a shelf of ice. Most icebergs in Arctic are jagged spikes.

The illustration shows that more than 80 percent of the iceberg is concealed below the surface. A ship can strike the submerged portion of an iceberg while it is still a reasonable distance from the portion protruding above the water.

Dandelion, Pokeweed, and Goosefoot

Kids can learn how early settlers used dandelion, and 62 other plants: horsetail to scrub pots and pans, oxalis for stomachache, teasel to brush up soft nap on wool, yarrow to stop bleeding (a remedy as old as the Trojan War). Identification is made easier by detailed drawings and by grouping plants into three sections—— those growing in woods, those in pastures, those in swampland. Plants in these general habitats are then sub-grouped into uses—— medicinal, food, or household. 1,2,3 directions are given for kids who want to plant an herb garden, collect and dry plants, make teas and salads from herbs, or dye cloth. CAUTION: If you are taking kids to eat off the land, check with a source on poisonous plants. Some plants have their problems—— although young pokeweed greens are edible, older leaves are not, and as few as two or three uncooked pokeweed berries can fatally poison a small child. Suggestion: Know Your Poisonous Plants, *Wilma Roberts James.*

—Betty Moss



Dandelion, Pokeweed, and Goosefoot
Elizabeth Schaeffer
1972; 94pp.
$4.50 postpaid
from:
Young Scott Books
Addison-Wesley
Publishing Co., Inc.
Reading, MA 01867
or Whole Earth

Dandelion

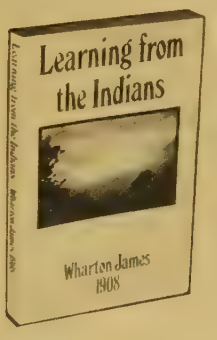
Taraxacum officinale

It is hard to believe, but no dandelion had bloomed in North America until the colonists brought dandelions with them for food and medicine. Remember the meaning of *officinalis*? The dandelion was once the official remedy for illness that came on in the winter. The same qualities in the plant that make it such a persistent pest now, made it a rich and much-needed source of vitamins for the early settlers. The dandelion stays green long into the winter and grows green again with the first warm sun of early spring. It can do this because of the food it stores in its deep taproot. The settlers used the greens as spring tonic and as a vegetable. They used the youngest leaves in salads and boiled the less tender ones. They roasted the roots to make a coffee-like drink. They even made wine from the blossoms! Now we see dandelions all over North America, even in the cities. The familiar yellow flowers come mostly in the spring, but you can usually see a few blooms all summer and into the fall.

Learning from the Indians

Originally titled, What the White Race May Learn from the Indian, *this book was first published in 1908. It offers an interesting insight into the mores of turn-of-the century America. The author feels that the Indian life-style of open hospitality, participation of both sexes in physical activity, and outdoor living in general should be copied. James is particularly concerned with the value of deep breathing exercises, in which he found Indians expert; with vegetarianism; and with heat/cold bath practices closely resembling sauna. James' photo collection is fascinating.*

—Francille Wilson



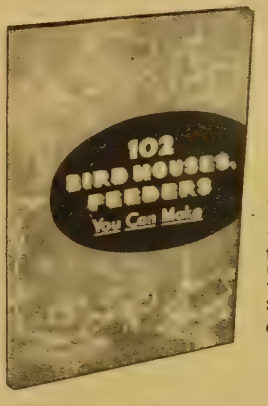
Learning from the Indians
Wharton James
1973; 269pp.
$2.95 postpaid
from:
Running Press
38 South 19th St.
Philadelphia, PA 19103
or Whole Earth

If girls as well as boys of the white race were to ride horseback more, much disease would flee away. Liver and stomach troubles are shaken out of existence on horseback; the blue devils and constipation are almost an impossibility, and the exhilaration of the swift motion and the vivifying influence of the deeper breathing, the shaking up of the muscles and nerves, the quickening effect of the accelerated heart action, and the readier circulation of well-oxygenated blood make the whole body a-tingle with a newness of life that is glorious. If I were well to do and had a score of children their chief education should be out of doors, and rain or shine, storm or calm, snow or sleet, winter or summer, boys and girls alike should ride horseback ten to twenty miles or more each day.

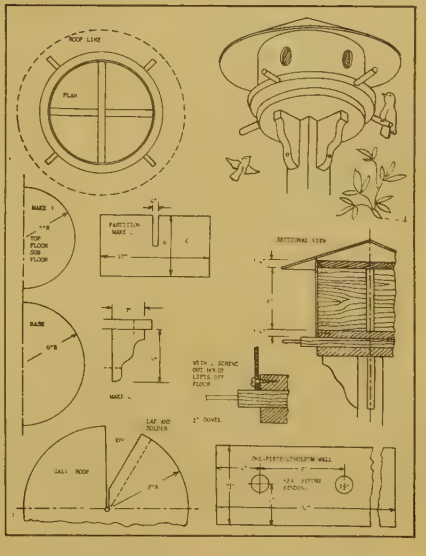
102 Bird Houses, Feeders You Can Make

A collection of neat plans for bird houses, bird baths, nesting boxes, and feeders—— each designed to attract specific species of birds. If you want to increase the bird population in your area, here are lots of clever, easy-to-execute ideas.

—DH



102 Bird Houses, Feeders You Can Make
Hi Sibley
1967; 96pp.
$3.50 postpaid
from:
Goodheart-Willcox
123 W. Taft Drive
South Holland, IL 60473
or Whole Earth



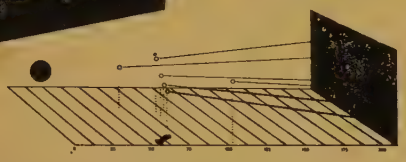
Four-apartment for wrens

Color Star Atlas

Easy-to-follow, beautifully illustrated observer's guide to the position of major stars and constellations, with their optimum periods of visibility. The star maps are super detailed, and the constellation charts are "specially printed in colors that remain clear by day or night." Continuing that marvelous line of English "amateur" scientists, Patrick Moore encourages the amateur star observer to join in the great adventure of astronomical discovery.

—DH

Color Star Atlas
Patrick Moore
1973; 112pp.
$7.95 postpaid
from:
Crown Publishers Inc.
419 Park Ave. S.
New York, NY 10016
or Whole Earth

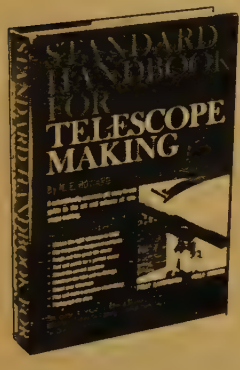


Star Distances. We now know that the stars are by no means at the same distance from us, and that the stars in any particular constellation are not necessarily associated with each other. The diagram shows the seven stars of the Great Bear or Plough, drawn at their correct relative distances from us. Two of the stars (Alkaid and Dubhe) are much more remote than the rest, and simply lie in the same direction as seen from the Earth.

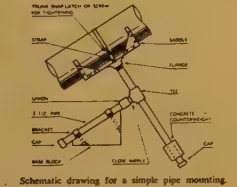
Standard Handbook for Telescope Making

Good book, and specifically designed for the people who want to build a telescope because they like them, but are not interested in calculus. Howard covers the field very well—— he's got a bit of history, and a bit of physics, and a bit of philosophy, and a hell of a lot of practical advice and instructions. The book probably isn't as much "fun" as Amateur Telescope Making I, II & III, but it's a lot easier to follow and anybody who has the time and can read standard English should end up with a fine optical instrument. He's particularly good about furnishing material lists and suppliers, and his drawings, photographs, whatever, are to the point and where they should be in relation to the text. There is a glossary that is excellent, and appendices for just about everything that the amateur needs/wants to know. Just remember that "amateur" translates as "lover," and you've got to love telescopes to build them well. At about $9, the book is very well worth it, even though you've been through the telescope thing before.

—Ralph Putzker
[Suggested by John Bradbury]



Standard Handbook for Telescope Making
N. E. Howard
1959; 326pp.
$8.95 postpaid
from:
Thomas Y. Crowell Co., Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth


Schematic drawing for a simple pipe mounting.

Star diffraction patterns. Left, eyepiece inside focus; center, at focus; right, eyepiece outside focus.

City Leaves, City Trees

There must be plenty of Tree Identification books, but this is the first one that really makes me feel I may one day be able to tell an elm from a ginkgo. Further, it is directed to city dwellers, a nice change. It starts out by telling you to pick a leaf from a tree and then match it with the shapes drawn and categorized: simple edge. toothed edge, lobed edge, lobed-toothed edge, etc. From there you are directed to the proper page for further information which is accompanied by a photograph of a tree in a city setting and a "photogram" of its leaf, fruit, flower, seed, thorn or bud. It's a beautiful book.

—Heidi Seney

City Leaves, City Trees
Edward Gallob
1972; 64pp.
$6.50 postpaid
from:
Charles Scribner's Sons
Vreeland Ave.
Totowa, NJ 07512
or Whole Earth

CHERRY

Cherry trees have narrow, single-alternate leaves with even-toothed edges. The bark has raised, horizontal markings. The Japanese Flowering Cherry is one of the Oriental Cherry trees that is planted for its blossoms and does not bear fruit. Two of the American fruit-bearing Cherry trees are the Pin and the Chokecherry, with small white flowers and fruits that grow in clusters. These trees are found in left-alone places, of which there are still some in every city. Look for wild cherries in July.

Clouds

Clouds are masses of water droplets or ice crystals floating in air; they do not only dramatize the sky, but they also predict the weather. ESSA (Environmental Science Services Administration) has put together a small chart which correlates pictures of clouds with their scientific names and the weather that might follow them. There are also illustrations of clouds seen from a satellite and by Radar. If you want to have a brief introduction to "reading the sky", this booklet is well worth one quarter.

—John J. Vollmer

Clouds
$.25 postpaid
from:
Superintendent of Documents
U.S. Government Printing Office
Washington. D.C.
20402

Sundials

Bet you thought that sundials are simple to make. Well, they are but figuring them out is another matter. I tried making one several years ago and found I couldn't manage to get one to work accurately all year. The only book I could find on the subject needed the services of a mathematician along with it to be of any use. This book shows you how to do it without a paralyzing math exercise, though there is enough theory so that you'll know why the thing works. Low energy too.

—JB

Sundials
(Their Theory and Construction)
Albert E. Waugh
1973; 228pp.
$3.50 postpaid
from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014
or Whole Earth

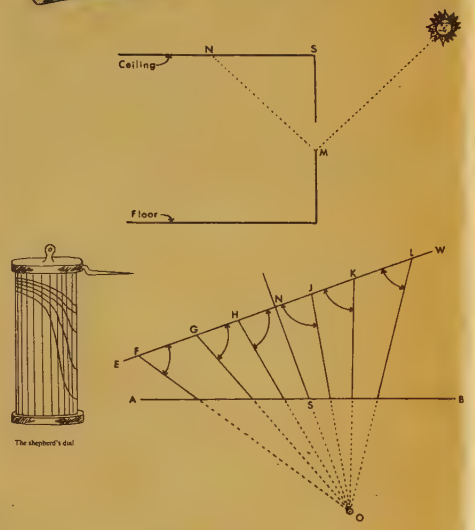


Figure 14.1 Laying out a reflected ceiling dial.

A mirror placed horizontally in a southern window will reflect a beam of sunlight to the ceiling of the room. As the sun moves across the sky from east to west, the reflected sunbeam moves across the ceiling from west to east; and if hour lines are properly drawn upon the ceiling, the sunbeam can be used to tell the time of day or even the day of the year. Isaac Newton laid out such a dial on a ceiling of his grandmother's home when he was a boy, and Christophe Wren made a similar dial in his home when he was a lad of sixteen. Any interested boy today can easily follow their example.

Universal Sunclock/Calendar

Super sundial-clock of aluminum and translucent plastic tells both time and date (time accurate plus or minus a minute or two, self adjusted for variations in the earth's orbital speed)—— Point at the sun and you set it.

—DH
[Suggested by Lee Ferber]

Universal Sunclock/Calendar
$9.95 postpaid
from:
Lighthearted Company
30801 Northgate Drive
Southfield, MI 48076

Tells local clock time accurate to within about 1 minute.
—Built-in compensation for the Equation of Time.

Tells date.

Works all year.

Works anywhere in the world.

Mounted outside a southerly window the Sunclock reads from indoors.

The point where the wire shadows cross on the translucent dial indicates, by simple visual interpolation, both time of day and date.

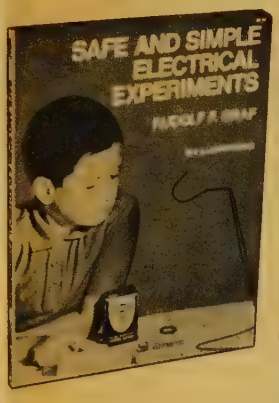
Requires no periodic adjustment after initial setting.

Made from durable aluminum, stainless steel, and plastic.

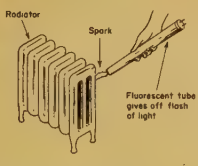
Safe and Simple Electrical Experiments

A delightful, simply written, home laboratory guide for conducting safe and simple electrical experiments to illustrate basic properties of static electricity, magnetism, current electricity, and electromagnetism. Ordinary materials found around the house, with a bit of wire and a small battery, turn into fascinating experiments. For serious young science students as well as those who like to build simple gadgets that really work. One hundred and one projects, all completely safe, and a brief review of the history of electricity and magnetism.

—Sylvia Jacobs



Safe and Simple Electrical Experiments
Rudolph Graf
1964; 117pp.
$2.50 postpaid
from:
Dover Publications, Inc.
180 Varick St.
New York, NY 10014
or Whole Earth



Get a *very fine, continuous* stream of water from a cold water faucet. Charge the comb by rubbing it briskly with the wool, and bring it close to the thin stream of water. Watch what happens as you get closer. As if by magic, the stream bends towards the charged comb. You can move the comb all around, and the stream will seem to wiggle like a snake.

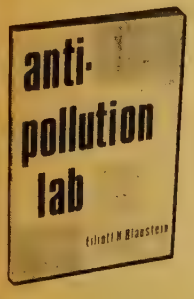
As soon as you let the water touch the comb, the comb loses its deflecting power. It must be *dried well* and recharged by rubbing before the experiment can be done again.

What happened was this: The negatively charged comb attracted the neutral stream of water and deflected it. As soon as the comb got wet, its charge leaked off through the water.

Anti-pollution Lab

Takes the mystique out of science for sixth graders on up. Instead, the practice of science is intimately connected to our lives. Great chapters on how to locate pollution sources in your community, how to measure the amount of pollution and how to examine the nature of some of the pollutants. Great soft technology trips for family, friends or schools. Covers air, water and solid particle pollution. Very easy to follow instructions and learn.

—PW



Anti-pollution Lab
Elliott Blaustein
1972; 128pp.
$2.25 postpaid
from:
Sentinel Books Publishers, Inc.
17-21 East 22nd St.
New York, NY 10010
or Whole Earth

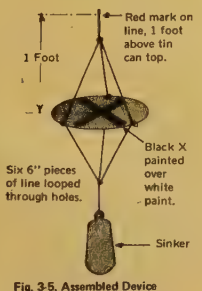


Fig. 3-5. Assembled Device to Measure Water Turbidity.

4. From a boat, dock or pier, lower the tin can disc into the water until you can no longer see the X on it. Of course, if the disc touches bottom before the X becomes invisible, try again in deeper water.

5. Measure and record the depth to which the disc must be lowered before the X disappears. The red markings on the line will indicate the depth reached.

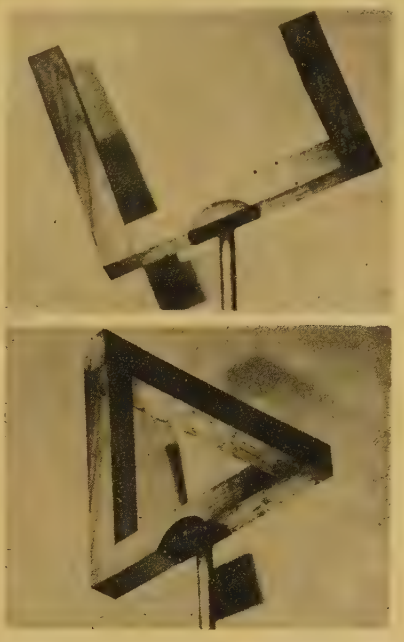
Note: If the disc must be lowered to a greater depth before it becomes invisible, the turbidity is less.

Exploratorium

The **Exploratorium** *is a living museum where adults and kids discover things by actually getting involved with the exhibits. This book describes the principles behind a number of the exhibits in a simple, straightforward fashion. Each description is accompanied by an illustration or photograph. It is an introduction to the experience itself which in terms of excitement, discovery and sensory stimulation is unduplicated anywhere.*

—Marcia Perlstein

Exploratorium
(Light Sight Sound Hearing)
Sheila Grinell
1974; 50pp.
$2.30 postpaid
from:
The Exploratorium
3601 Lyon St.
San Francisco, CA 94123

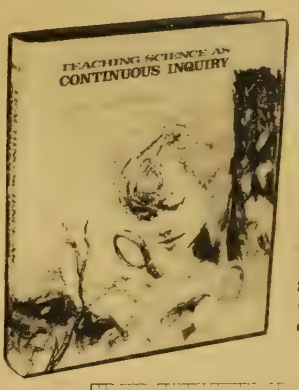


The museum has built a man-sized wooden object that appears to be an actual impossible triangle when the visitor looks at it with one eye from the right vantage point. The object is hardly triangular, as the photograph shows. But seen without stereoscopic depth, from the place where perspective aligns the two free edges, it is most likely interpreted as a triangle. Actually, any shape you see with one eye could stand for an infinity of objects in perspective. Experience plays a large part when you choose the object you see.

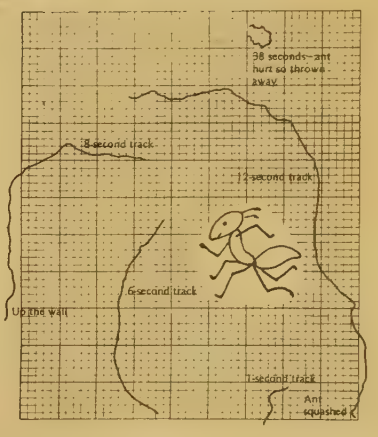
Teaching Science as Continuous Inquiry

An excellent resource book for training teachers, or anyone, to stimulate science learning by inquiry. Progression of material is based on Piagetian theories of conceptual development. Each chapter is organized with an opening statement of behavioral objectives, proceeds to informative material and theory, concludes with classroom projects based on inquiry.

—Betty Moss



Teaching Science as Continuous Inquiry
Mary Budd Rowe
1973; 585pp.
$10.95 postpaid
from:
McGraw-Hill Book Co.
Princeton Rd.
Hightstown, NJ 08520
Manchester Rd.
Manchester, MO 63011
8171 Redwood Hwy.
Novato, CA 94947
or Whole Earth



Next, you need to find some way of keeping track of how far an ant moves in the selected time period, say one minute. One way to do that might be to pick out an ant, put it on a sheet of paper, put your pencil down behind the ant, and make a track of the ant's path. You will introduce some error at this point because sometimes you will not be able to track an ant exactly. Try it. Remember that some error is inevitable.

Science Experiments that Really Work

Here are 48 experiments for either kitchen or classroom that will help kids learn to generalize from cause and effect. Experiments are grouped in seven sections: air, carbon dioxide, heat, crystals, magnetism, electricity, and sound. Photos of multi-ethnic groups add to the book's appeal. Help for the non-expert teacher/parent: An appendix of brief paragraphs explaining scientific principles behind each experiment.

—Betty Moss

Science Experiments that Really Work
Dorothy Habben
1970; 158pp.
$2.95 postpaid
from:
Follett Publishing Company
Division of Follett Corp.
1010 W. Washington Blvd.
Chicago, IL 60607
or Whole Earth

Grow a Crystal Garden

Here's what you need:
1. A mixing bowl and a flat dish
2. A tablespoon
3. 6 tablespoons of water
4. 1 tablespoon of ammonia
5. 6 tablespoons of laundry blueing
6. 6 tablespoons of salt
7. Food coloring
8. 5 pieces of charcoal

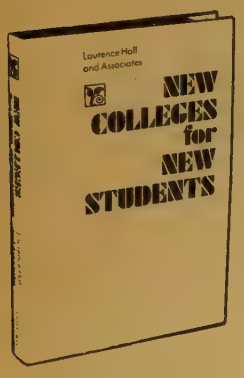
Here's what you do:
1. Mix the salt, water, laundry blueing, and ammonia together in your mixing bowl.
2. Put the pieces of charcoal into the flat dish.
3. Pour the liquid mixture over the charcoal.
4. Scatter several drops of food coloring over the charcoal.
5. Set the flat dish aside for a day in a warm dry place. Then look at it every day and see your garden grow.

Question:
Is the crystal garden alive?

New Colleges for New Students

Wait! Before trudging down that predictable path to that predictable college, check this book and see if there isn't a school more wildly suited to your real needs. It's a detailed, enthusiastic survey of dozens of working alternatives to old Fuck U.

—SB



New Colleges for New Students
Laurence Hall and Assoc.
1974; 210pp.
$8.75 postpaid
from:
Jossey-Bass, Inc.
615 Montgomery St.
San Francisco, CA 94111
or Whole Earth

About 5,200,000 Americans are going to school via the mailbox this year. More than 60,000 of them are enrolled in what one high official of the National Home Study Council calls "the most exciting school in the correspondence study field in the last twenty years." It is the Advance Schools, Inc., headquartered in Chicago but spread across 37 states with 125 district offices and almost 600 sales representatives.

•

DQU is not a typical university, but then it is not trying to serve the typical university student. Its student body consists of about one hundred dropouts, migrants, kids from reservations and East Los Angeles, and anybody else who walks onto its campus, a former army communications base six miles west of Davis, California. It is the first university of its kind in the United States: half American Indian and half Chicano; and it is designed to be fully independent. It has no ties to other institutions—— or to most current practices in American higher education. Students can stay for two years and get an Associate of Arts degree or for two weeks and get a certificate. They get credit for taking the usual array of college courses—— and for participating in tribal dances or planting corn. In the past, the administration got food for the student cafeteria by trading grass grown on campus for meat slaughtered by a nearby farmer, and sheep still graze just outside the administration building.

•

The colleges described in this book are designed around the needs of students. Such an approach should not be revolutionary, but it is. For years we have been trying to make students fit colleges, rather than the reverse. When they have not fit, failure has been placed at the feet of the student, not the colleges.

•

Oxford Correspondence Courses

Gentlemen:

I have a suggestion relative to the "Education" section concerning correspondence study. Wolsey Hall, Oxford, England offers a large variety of courses in mathematics, science, bookkeeping, languages and a host of others at ¼ the cost of comparable courses in the U.S., while the textbooks (including shipping) are usually less than half the cost of American textbooks. Also, they have a very liberal time-payment policy. Wolsey Hall does not give diplomas, but prepares you to pass the G.C.E. examination, which may be taken in the U.S. Passing a certain number of "O" and "A" levels entitles you to register at the University of London and receive your degree (usually requiring 7 years of study) entirely by mail! (excluding examinations, which may be taken in many large cities in the U.S., or smaller ones by special arrangement). This is a highly respected, reputable university whose degree commands respect.

As far as Wolsey Hall is concerned, the courses are fairly stiff, but quite comprehensive and very good. I have taken Latin, Attic Greek, and Formal Logic and found the lessons to be tougher, longer and *much cheaper* than the several Italian courses I took from the University of California Extension program and the Home Study Course in Attic Greek I took from Loyola at Chicago.

What I'm saying is, all I want is the knowledge, I don't need a diploma to prove to myself I know something, and for that, it's great!

Sincerely,
Mrs. Ruth Barber
Hamilton, Colorado

For more on correspondence courses, see Pg. 405.

—SB

Lindisfarne

William Irwin Thompson's apocalyptic vision school (see his Passages About Earth, *Pg. 458).*

—SB

The Lindisfarne Association in Southampton, Long Island, which became a physical reality in 1973, is an educational and spiritual community in which people of all ages can work and study together in new forms of growth and transformation. At Lindisfarne the program of residence *is* instruction in the transformational disciplines of Yoga, Buddhism, and Sufism as well as in the esoteric schools of our own Judaic and Christian traditions. The program is based on the Pythagorean integration of religion, science, and art so seminars in science and the humanities are given relating the exoteric to the esoteric. Although the esoteric techniques of contemplation of the great universal religions are affirmed at Lindisfarne, there is no attempt to synthesize these techniques.

Lindisfarne grants neither degrees nor credits though students may find that other institutions are willing to award credit for work at Lindisfarne. People of all ages and backgrounds are welcome. People at any stage in life—— middle-age, retirement, traditional student age, families with children—— can contribute to and gain from Lindisfarne. Spring, summer, and fall sessions are given each year. Classes may also be taken individually on a non-resident basis and weekend visitors are welcomed if they give advance notice. Each day begins with group meditation and communal work in the morning followed by lectures, seminars, and workshops in the afternoon and evening. Each person works out his or her own balance between self and community.

Lindisfarne has neither formal application procedure nor fixed entrance requirements. Each person is considered individually and carefully, so a visit, telephone call, or detailed letter is important. For further information about courses, activities, and costs, please call (516) 283-8210 or write: The Lindisfarne Association, 50 Fishcove Road, Southampton, New York 11968.

•

The Techniques of Springboard Diving

A friend who teaches swimming/diving gives this book the highest marks. Excellent layout with easy-to-follow photo sequences for developing various dives. Photos are better than drawings for illustrating diving positions, and this sequential photo format is outstanding. It also serves to attract the attention of younger divers who react to the photos and then want to read the text. The introductory explanation of diving mechanics (center of gravity, inertia, body axes, conservation of angular momentum) is splendid, as are the pointers on what's wrong with incorrect dives. There are nice little hints on how to strengthen the body for specific dives, as well as a fine section on judging dives, and a good index. This is a first-rate training tool for both the novice diver and the experienced competitor.

—DH

The Techniques of Springboard Diving
Charles Batterman
1968; 113pp.
$5.95 postpaid
from:
The MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

Making It

From the authors of Let's Go: The Student Guide to Europe *comes a guide to student finances. Whether you're in school or not, it can help you through the bizarre task of getting-money-though-young.*

—SB

Making It
(A Guide to Student Finances)
Harvard Student Agencies, Inc.
Amy Edith Johnson, ed.
1973; 319pp.
$4.95 postpaid
from:
E.P. Dutton & Co., Inc.
201 Park Ave. South
New York, NY 10003
or Whole Earth

Job	Description	Skills Needed	Where to Apply
Hospital Worker	Tasks may include laboratory work, being a night receptionist, etc.	Varies greatly.	Hospitals and clinics.
Hotel Clerk	Greets and registers guests, issue keys, and provides addition services as required.	Ability to deal with public.	Hotels, motels, and vacation resorts.
Keypunch Operator	Transfers information from written word to tabulator cards by operating keypunch machine.	Ability to operate keypunch machine.	Large industrial and business firms.
Library Worker	Attends desk and shelves books.	None.	College, public, and private libraries.
Medical Laboratory Assistant	Performs various tasks in lab including labeling, sterilizing, etc.	General knowledge of a physical science.	Independent medical laboratories, pharmaceutical laboratories, clinics, and hospitals.

One sophomore got a lucrative carpenter's job because his mother's church friend's cousin's friend was a union official in one town who knew another union official in a second town. The chain was long and tenuous, but it serves to illustrate that point that whereas it *does* matter *whom* you know, it does not necessarily matter much how well you know them.

Independent Study Program

So sensible you wonder what's taken it so long to reappear. A system of apprenticeship, internship, to an international guild of tutors. For a period of time like eight months you live near and work with a master the likes of Anais Nin, John Whitney (film-maker), Buckminster Fuller, Jan Myrdal, Kenneth Rexroth, Yehudi Menuhin, Page Smith, or Ivan Illich. Eight months tuition is $2,624.

—SB
[Suggested by Gregory Bateson]

Independent Study Program
Information free
from:
International Community College
1019 Gayley Ave.
Westwood Village
Los Angeles, CA 90024

Clown College

Run away and join the circus. No kidding. Free tuition; you pay for room, board, and makeup. Eight week course begins every September.

—SB

for information:
Clown College
P.O. Box 1528
Venice, FL 33595

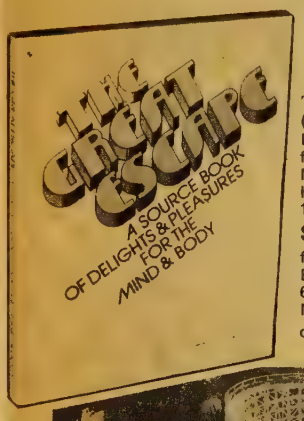
Q. What subjects are taught at clown college?
A. Clowning, Clown makeup, Comedy Acrobatics, Fundamental Gymnastics, Acrobatableaux, Juggling, Equilibrium (unicycle riding, rolling cylinder, stilt-walking), Mime, Comedic Movement, Pantomime, Arenaction, Yoga, Elephant Riding, Web-sitting, Clown Props Building, Clown Costuming (Design, Cutting and Draping). Lectures on: Trouper Nutrition; Famous Clowns of the Past; Origins of Clowning; The Mechanics of Visual Comedy; History of the Big Tops; Arena Circuses; Circus Jargon; Transportation and Logistics; Production Clowning; Engagement and Performance Direction; Circus Promotion, Publicity and Public Relations; Animal Training & Care; Circus Bands and Music; Thrill Acts; The Circus in Art and Literature.

•

The Great Escape

Run out of things to do? No excuse now. This is what I call a "Basket Book"—— you shuffle through it and find all sorts of things you didn't expect to find. A list of the world's biggest roller coasters, for instance! Who to see about riding a freighter to Africa. A museum of magic. hmmmm and here's directions on how to make a Kirlian Camera for less than $10.00; and home swapping and joining a circus, and the date of this year's Dowser's convention. Nice day for somethin'!

—JB
[Suggested by Beth Fairbanks]



The Great Escape
(A Source Book of Delights and Pleasures for the Mind and Body)
Min S. Yee and Donald K. Wright, eds.
1974; 256pp.
$7.00 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

•

"It's the best way to learn about Japan—— people are more important than monuments," said a recent American participant in Japan's Home Visit System. The Home Visit System, provided in Tokyo and six other Japanese cities, arranges for foreign visitors to pay a call on a Japanese family.

To arrange for a home visit in Tokyo, apply in person between 10 a.m. to 4 p.m. at the Tourist Information Center on the ground floor of the Kotani Building. In Kyoto, Osaka, Kobe, Otsu, Nagoya or Yokohama, apply at the local tourist office or through your hotel.

•

Home Swapping

There's a new way to vacation for those who have had it with hotels—— you can avoid the cost and hassle of a hotel by swapping or renting digs in the spot where you want to vacation. You eliminate some of the sorrier aspects of travel and also save on meals, since most of the swaps or rentals have kitchens.

Adventures-in-Living. Winnetka, Ill. 60093. Costs $10 per year to list; one main directory plus three supplements yearly.

Holiday Exchange Bureau. Grants, N.M. 87020. Costs $15 yearly to list ($10 if you're retired); monthly bulletins.

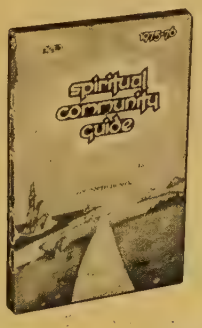
Home Exchange Club of California. San Leandro, Calif. 94577. Costs $15 to list for the first year, $8.50 thereafter; directory issued four times each year.

Vacation Exchange Club. 119 Fifth Ave., New York, NY 10003. Costs $9.50 to list, plus $3.50 for a photo (optional) annual directory plus two supplements in the spring.

Spiritual Community Guide

This is a book which lists the spiritual centres, food stores, restaurants, publishing houses, book stores and other haunts of the American Spiritual Underground. If you're in Glen Burnie Md. you would be glad to know there a food store for you while Rangeley, Maine has the Orgone Center for those passing through. In front of the 3000 listings, there is a hundred pages of short descriptions of spiritual groups as well as a lot of pictures of high beings. A useful book if you want to know who's who, where they hang out and what else is in town.

—Jim Fadiman



Spiritual Community Guide
1974; 192pp.
$3.50 postpaid
from:
Spiritual Community Publications
Box 1080
San Rafael, CA 94902
or Whole Earth

minnesota

Brownsville *Foodstore:* BROWNSVILLE MILLS, Main St., 68321, 825-4131.
Fremont *Foodstore:* MURDOCK NATURAL FOODS, 131 E. Military, 68025.
Kearney *Foodstore:* SPECIALTY FOODS, 25 W. 22nd St., 68847, 236-1441.
Lincoln *Center:* BIG STONE COLONY, 56240, 748-7961.
Minneapolis *Center:* ANANDA MARGA YOGA SOCIETY, 3812 Elliot Ave. S., 55407, 823-2091.
DHYANA-MANDIRAM YOGA CENTER, 2104 30th Ave. So., 55406, 332-8838. Large center in the city with ashram in country. Classes in meditation, yoga, retreats. Disciples of Swami Rama.
GNOSTICA BOOKSTORE AND SCHOOL, 1414 Laurel Ave., 339-2270 (bookstore), 339-2420 (school).
LIBERAL CATHOLIC CHURCH, Church of St. Francis, 3201 Pleasant Ave., 55408
MINNESOTA ZEN MEDITATION CENTER, 425 Fifth St., S.E., 55414.
RUHANI SATSANG, 2025 Ide, Apt. 201, 55109, 770-1720.
SRI AUROBINDO SOCIETY, 3124 Dupont Ave. S., 55408.
UNIFICATION CHURCH, 1817 Washington S.E., 331-6415.
Bookstore: NEW MOON BOOKSHOP, 4222 Nicollett Ave. S., 55409.
THE TAROT, 5406 Pen Ave. S., 55419, 922-2884.
Foodstore: NORTH COUNTRY CO-OP, 2129 Riverside Ave., 55404, 338-3110.
PEOPLES BAKERY, 1537 E. Lake St., 55407, 721-7205.
SELBY FOOD CO-OP, 588 Selby, 55104, 227-1453.
THE SPROUT, 604 W. 26th St., 55405, 824-4747.
TAO TRADITIONAL ORGANIC FOODS, 2200 Du Pont Ave. S., 55403, 377-4630.
WHOLE FOODS, 2502 1st Ave. So., 55404, 824-3474
Restaurant: EARTH KITCHEN, Friday night: Newman Center, 1701 University Ave. S.E. Weekday lunch: Episcopal Center, 517 17th Ave. S.E.
MUD PIE, 2549 Lyndale S., 55405, 823-9668.
RIVERSIDE CAFE, Cedar & Riverside.
Other: THE CLEAN PEOPLE, 2024 16th Ave. S., 55404, 336-4817. Biodegradable soaps.
MAYA, Calvary Baptist Church, 2608 Blaisdell Ave. So. (Minneapolis), 55408, 827-3549. New Age publications.
St. Paul *Center:* MSIA, 767 Heinel Dr., 55113.
VIRGINIA STREET CHURCH, 172 Virginia St., 55102.
Bookstore: CARL L. WESCHKE LIBRARY, 476 Summit Ave., 55102, 224-8811.

Islamic Mosques:

Except during times of prayer, non-Moslems are allowed in some mosques, particularly in Turkey. This is not the place for meditation in traditional Hindu postures. Most mosques prohibit non-Moslems and should you get into these mosques you will be carefully watched to see if you know each nuance of the worship. One slip may endanger you. If you sincerely wish to go to a mosque, befriend a Moslem and go along with him. Ask to learn the ritual washing, to perform the prayer, to hear the Qur'an; this will endear you to Moslems. To do sincerely brings amazement, and to enter Islam by the front door and do *dhikr* in its holy places of worship is to sense the intoxicating mystery of creation.

•

A Pilgrim's Guide to Planet Earth

The New Spiritual Community Guide *(above) covers just the U.S. and Canada. Here the same authors do it for everywhere.*

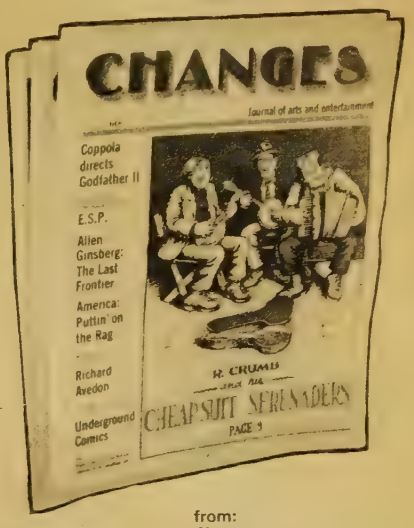
—SB

A Pilgrim's Guide to Planet Earth
1974; 288pp.
$4.50 postpaid
from:
Spiritual Community Publications
Box 1080
San Rafael, CA 94902
or Whole Earth

Changes

From the exotic East Coast, a strong challenger to Rolling Stone. *Good interviews, good trend-surfing.*

—SB
[Suggested by Ed Mulheen III]



Changes
Susan Graham, ed.
$6.50/yr (monthly)
from:
Changes
P.O. Box 631
Cooper Station
New York, NY 10003

As far as mission was concerned, I took *The Spirit*, as a writer, very seriously. I was writing my heart out, literally, because it was my medium. You know, at the time you don't theorize, you just put one foot in front of the other. Like painting—— eighty percent of successful painting is serendipity. It's because the paint didn't dry and tomorrow morning there is a mottling in the corner. So you say, "Gee, that's good, I think I'll do that again." And that goes all the way down to the fellows who were doing frescos in Italy.

So I really believed from my own point of view that this was my medium. Of all the things that have been said recently, the greatest satisfaction comes from the fact that comics are now regarded as an art form. They weren't then. I thought they could be, and I tried all kinds of things with the medium, including educational comics. The only real claim I can make to any prescience was that I thought comics were a true medium. I still feel it today, and I teach it (New York School of Visual Arts) on that basis, and I hope I can move further in that direction in the next few years. It still hasn't gone far enough.

—Will Eisner

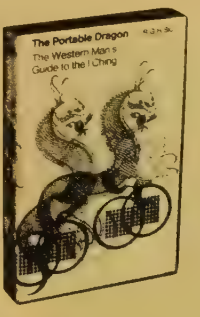
Well, I think I'm a pro by now. I can work on a bad day—— that's a definition of a pro.

—Norman Mailer

The Portable Dragon

This is the I Ching *(Pg. 433) retranslated and annotated with an amazing kaleidoscope of world literature by R.G.H. Siu (author of* The Tao of Science, *Pg. 23). Damned fine browsing. Or is it dowsing?*

—SB



The Portable Dragon
(Western Man's Guide to the I Ching)
R.G.H. Siu
1968; 463pp.
$1.95 postpaid
from:
The MIT Press
28 Carleton St.
Cambridge, MA 02142
or Whole Earth

Rubashov stared through the bars of the window at the patch of the blue above the machine-gun tower. Looking back over his past, it seemed to him now that for forty years he had been running amuck—— the running-amuck of pure reason. Perhaps it did not suit man to be completely freed from old bonds, from the steadying brakes of "Thou shalt not" and "Thou mayst not," and to be allowed to tear along straight toward the goal.

Arthur Koestler
Hungarian (Born 1905)

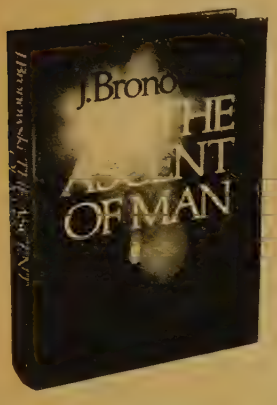
The man attempts to gain his objectives by force. His blind obstinacy leads to calamity. The use of armies under these conditions will result in a great defeat and a long-lasting disaster for the state.

The Ascent of Man

What were the pivotal events in the "ascent of man?" In his newest book, Jacob Bronowski—— a most unusual scientist—— traces the discoveries that have shaped man's cultural, intellectual and technological development. In brilliant style he dissects the entire developmental process and assembles it into a new whole. One reason the book succeeds so well in tracing these intricate patterns, is the clarity with which Bronowski speaks—— anyone can follow him through the most difficult discussions. Another plus is the lavish illustrations (scenes from the film series upon which the book is based).

If ever there were a gap between the two cultures, the sciences and the humanities, Bronowski bridges it by synthesizing both into one intellectual system. His attitude toward science is crucial: "You must see that in a sense all science, all human thought, is a form of play;" "there cannot be a philosophy, there cannot even be a decent science, without humanity." With authority Bronowski describes a science based on humanism, and his positive outlook is contagious. Read this book: it will give you a new vision, perhaps an encouraging one.

—John Vollmer



The Ascent of Man
Jacob Bronowski
1973; 448pp.
$15.00 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154
or Whole Earth

The Greeks did not invent the arch either, and therefore their temples are crowded avenues of pillars.

•

But for this reason the arch can be made of parts: of separate blocks of stone which the load compresses. In this sense, the arch is the triumph of the intellectual method which takes nature apart and puts the pieces together in new and more powerful combinations.

•

To us gold is precious because it is scarce; but to the alchemists, all over the world, gold was precious because it was incorruptible.

•

The other lesson makes a point about scientific method. Dalton was a man of regular habits. For fifty-seven years he walked out of Manchester every day; he measured the rainfall, the temperature—— a singularly monotonous enterprise in this climate. Of all that mass of data, nothing whatever came. But of the one searching, almost childlike question about the weights that enter the construction of these simple molecules—— out of that came modern atomic theory. That is the essence of science: ask an impertinent question, and you are on the way to the pertinent answer.

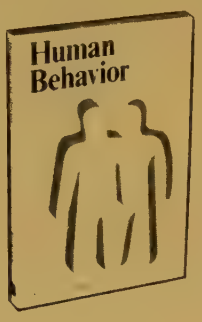
•

The peacock displaying.

Human Behavior

All that the behavioral sciences have to teach about human nature is in this book reduced to 1,045 generalizations with supporting evidence. There is more to human nature than this, but these statements which are supported by hard evidence are useful to know and sometimes startling. I have sometimes seen this book in the offices of lawyers and others who need a practical knowledge of human nature.

—Philip Ebersole



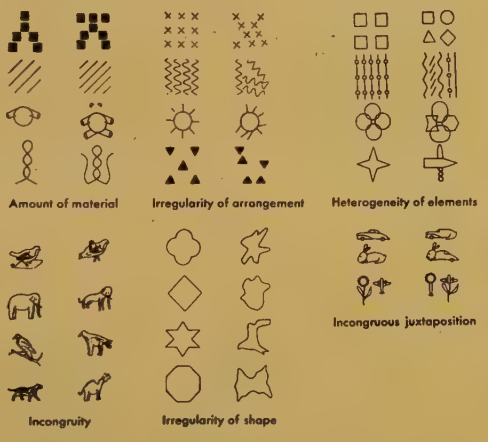
Human Behavior
(An Inventory of Scientific Findings)
Bernard Berelson and Gary A. Steiner
1964; 712pp.
$2.25 postpaid
from:
Harcourt Brace & Jovanovich, Inc.
757 Third Ave.
New York, NY 10017
or Whole Earth

E1. There is no conclusive evidence that psychotherapy is more effective than general medical counselling or advice in treating neurosis or psychosis. Strictly speaking, it cannot even be considered established that psychotherapy, on the average, improves a patient's chances of recovery beyond what they would be without any formal therapy whatsoever.

•

E8.1. The more men are exposed to actual combat in battle, the less is their conviction that the ideological value of the war is worth the cost.
E8.2 The less the personal idealistic commitment to the cause of the war, the less the disillusionment among the victors afterward (itself a customary occurrence), but the greater the psychological costs to the individual participant and probably the greater social cost to the community (in pensions, disgruntlement, claim for special consideration for "meaningless" sacrifice and so on).

•



Adults spend more time expanding the right-hand figures than they do the corresponding simple or more regular or more familiar versions.

An Introduction to the Study of Man

Want a one-volume one-line intelligence introduction to everything: J.Z. Young—— I've been hearing for years about his work on brains. But this is amazing. It's like Needham's jump from biology to the scientific history of China (Pg. 120). If I were trying to decide what serious field of research I wanted to go into, I'd start here. Whichever I settled on I'd have a good technical introduction, and I'd know about the others.

—SB

An Introduction to the Study of Man
J.Z. Young
1971; 719pp.
$6.95 postpaid
from:
Oxford University Press
16-00 Pollitt Drive
Fair Lawn, NJ 07410
or Whole Earth

The representation of the environment is not necessarily included in any one individual only; it is a property of all the members of the species jointly. In many ogranisms maintenance of the similarity between the environmental representation and that of the species is ensured by the simple fact that those individuals that do not fit their surroundings die. To take one example, among bacteria there are individuals with slightly differing powers of chemical action, acquired by heredity. In a given environment containing certain raw materials, only those of the population who are able to utilize these materials will survive. It is thus ensured that the phenotype of the population appropriately represents the condition of the environment. The individual receives the simple piece of information "live" or "not live" from the environment, enabling the species to continue to survive if the future is like the past (see Chapter 3).

This definition of success is often criticized as suggesting that evolution and adaptation result in nothing but improved reproductive efficiency. Of course the capacity to continue is precisely the central characteristic of life. It is in this power to delay the tendency of organization to pass over to homeogeneity that living things differ from non-living ones. The point is that the essence of the power resides in the presence of a reservoir of variety out of which selection can be made to achieve a given end. Such concepts of 'selection' and 'end' seem to be very different from those concepts of reversibility upon which physics is built. We shall have to inquire how this capacity may have arisen (Chapter 26).

•

Photograph of Silbury Hill (England). This is the largest man-made mound in Europe. Its date and function are unknown.

Temenos

A personal periodical of personal prose, somewhat like Manas *(Pg. 410), with better music.*

—SB
[Suggested by John Steiner]

Temenos
Gil Bailie, ed.
By subscription.
Write for sample issue and price.

from:
Temenos
100 Varennes St.
San Francisco, CA 94133

One must ask, with the Arthurian Knight of the Holy Grail: "What does it mean?" Whatever the course that we are following in some fundamental universal quest, its future lies in the direction of that new and redeeming experience that is always accompanied by awe. *Our planet is a temple and our specie is the steward of that temple.* The recognition of that one fact, so long in coming, yet, in a larger perspective, so close at hand, will totally transform what our frail confidence now clings to as "reality."

•

The Clinch River valley so constituted itself for me as I stood next to the river somewhere between Oak Ridge and Knoxville. . . somewhere between day and night. . . between burial and redemption. Somewhere on the cusp. It was the voice of a woman: "I have watched them all. The deer, the bear, the Cherokee, the European and the machine. I have not been impartial. I have seen the people who have recently settlad in this valley; they are the emissaries of a restless tribe. I have watched them build their homes and I have looked closely at their eyes. They were engaged in serious business and they were forgetful. There were essentially two groups of them, those who were asleep and those who were afraid. Since I have watched them carefully, they think that I am a witch. A third group, neither asleep nor afraid, has managed to go unnoticed. But their numbers are few.

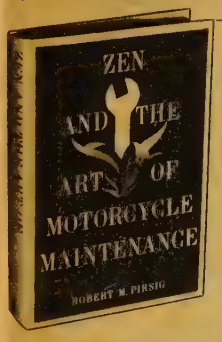
Something awkward happened in the valley. They invented electricity and began to fear the dark. They turned to buying and selling all manner of stuff, often it seems, just to keep their minds off having someday to die. After a couple of generations people thought it had always been that way. No one remembered the legends. They widened the road to Knoxville. The one to Damascus was closed.

•

Zen and the Art of Motorcycle Maintenance

There is a technology abroad in the world, that most of us do not understand, that appears to be destructive of life, sanity, and our environment. Pirsig knows and tells us the root of the conflict between man and his nature. It is of course man's concepts and language that he uses as tools; the problems of their mis-use date from Greek philosophic thought. I would use this book for several purposes: to find a resolution and wholeness in life; to understand technology in a way, and art in another; to share with another man the depths of his soul.

—Irving Fish



Zen and the Art of Motorcycle Maintenance
(An Inquiry into Values)
Robert M. Pirsig
1974; 412pp.
$7.95 postpaid
from:
William Morrow and Co.
Wilmot Warehouse
6 Henderson Dr.
West Caldwell, NJ 07006
or Whole Earth

John was going at it immediately and intuitively, grooving on it. I was going at it in terms of immediate appearance. I was seeing what the shim meant. He was seeing what the shim was.

•

Care and quality are internal and external aspects of the same thing.

•

What we have here is a conflict of *visions of reality*. The world as you see it right here, right now, *is reality*, regardless of what the scientists say it might be. That's the way John sees it. But the world as revealed by its scientific discoveries is also reality, regardless of how it may appear, and people in John's dimension are going to have to do more than just ignore it if they want to hang on to their vision of reality. John will discover this if his points burn out.

That's really why he got upset that day when he couldn't get his engine started. It was an *intrusion on his reality*. It just blew a hole right through his whole groovy way of looking at things and he would not face up to it because it seemed to threaten his whole life style. In a way he was experiencing the same sort of anger scientific people have sometimes about abstract art, or at least *used* to have. That didn't fit *their* life style either.

What you've got here, really, are *two* realities, one of immediate artistic appearance and one of underlying scientific explanation, and they don't match and they don't fit and they don't really have much of anything to do with one another. That's quite a situation. You might say there's a little problem here.

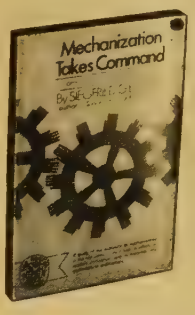
•

I like the word "gumption" because it's so homely and so forlorn and so out of style it looks as if it needs a friend and isn't likely to reject anyone who comes along. It's an old Scottish word, once used a lot by pioneers, but which, like "kin," seems to have all but dropped out of use. I like it also because it describes exactly what happens to someone who connects with Quality. He gets filled with gumption.

Mechanization Takes Command

The swan song of complex and ingenious handicraft. The history of the door lock, the stove, the butcher's tools, agricultural plows and white bread. Watch the human hand shrivel and the machine take command. Finally, I could understand how floor mats turned to spring mattresses. A comprehensive look at what European and American humans believe is necessary for comfort.

—PW



Mechanization Takes Command
(A Contribution to Anonymous History)
Siegfried Giedion
1948; 743pp.
$3.95 postpaid
from:
W.W. Norton & Co., Inc.
500 Fifth Ave.
New York, NY 10036
or Whole Earth

Just as the origin of the planned Greek city is bound up with Ionia, the Gothic with the Isle de France, and the Renaissance with Florence, so the mechanization of agriculture is indivisbly connected with the prairies of the Middle West.

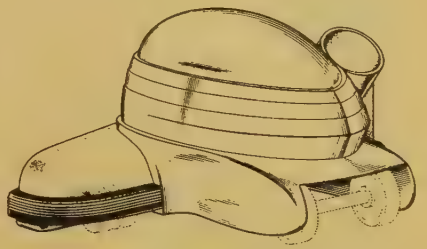
•

In the popular sense, 'streamline' is used interchangeably with the word 'modern.'

From the start, it was understood that the phrase was not to be taken literally. Today the layman, unfamiliar with aerodynamics, calls almost everything 'streamlined' when he really means 'graceful lines.' We have 'streamline' radio cabinets, toasters, cigarette lighters, and even gasoline with 'streamline' action. The development of the science of aerodynamics and its application to airships and airplanes has created in the public a sense for fleeting lines, and these lines, being recognized by designers as a decorative element, have been emphasized to give the impression of speed. The automobile manufacturer, to give the sales appeal of a visual impression of the speed that the engineer has built into his machine, has used and is using 'streamlining' extensively.

Streamlining began on trains. A tubular form was given to railroad cars in 1887. But not until 1934 was the streamlined train, Diesel driven, with steel skeleton and corrugated aluminum skin, put into service, whose cars were joined in a continuous line. Around that time the streamline automobile also gradually took shape. A special bodywork (1932), which soon became popular, marked the beginning of the trend. At first one spoke not of streamline design but simply of redesign, whether of washing machines or of small mechanical parts. Serious attempts were made to improve the product in itself; thus we hear instances of pressed metal parts becoming 30 per cent cheaper to make, 37 per cent lighter, and at the same time improved in strength and performance. This was called 'product engineering,' which phrase a trade journal, published in New York from 1930 on, adopted for its title long before 'Appearance Counts' became the motto.

•



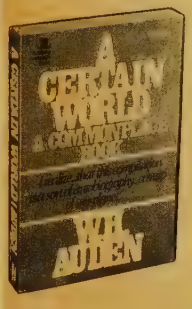
Streamlined Casing for Vacuum Cleaner, U.S. Patent Design, 1943. 'I have invented a new, original and ornamental Design for a Suction Cleaner Casing or the like.' U.S. Patent Design 135,974.

Binding Mechanized: Harvester with Wire Self-Binder, Walter A. Wood. 1876. The two men have disappeared from the platform: an automaton now fastens the wire. Patented in 1871, the wire-binder on Wood's machine was on the market by 1873. McCormick's wire-binder was developed at the same time.

A Certain World

The best prose writers and selectors are invariably poets. This collection of W.H. Auden's favorite quotes (prose and verse) belongs on the shelf by the toilet for rewarding serendipity. (More serendipity: **The Portable Dragon,** *Pg.* **733;** *Zen and* **English Literature,** *Pg.* **685** *;* **The Practical Cogitator,** *Pg.* **392***).*

—SB



A Certain World
(A Commonplace Book)
W.H. Auden
1970; 438pp.
$3.50 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

EATING

The significance of the Mass. As biological organisms, we must all, irrespective of sex, age, intelligence, character, creed, assimilate other lives in order to live. As conscious beings, the same holds true on the intellectual level: all learning is assimilation. As children of God, made in His image, we are required in turn voluntarily to surrender ourselves to being assimilated by our neighbors according to their needs.

The slogan of Hell: Eat *or* be eaten.
The slogan of Heaven: Eat *and* be eaten.

Grub first: then ethics.

Bertholt Brecht

Eating is touch carried to the bitter end.

Samuel Butler II

•

The one who loves and understands a thing best will incline to use the personal pronouns in speaking of it. To him there is no neuter gender.

H.D. Thoreau

•

Make me chaste and continent, but not just yet.

St. Augustine

•

Letting rip a fart——
It doesn't make you laugh
When you live alone.

Anon. Japanese
(trans. Geoffrey Bownas)

•

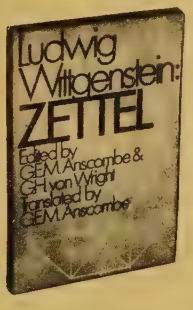
Tradition means giving votes to the most obscure of all classes—— our ancestors. It is the democracy of the dead. Tradition refuses to submit to the small and arrogant oligarchy of those who merely happen to be walking around.

G.K. Chesterton

Zettel

Zettel is a collection of Ludwig Wittgenstein's aphorisms, insights, and questions, that will turn your head inside-out and outside-in again. You needn't be a logician/semanticist or a student of the **Tractatus** *to get hooked on the Wittgensteinian quest for how we "think", how we "see", how we "imagine" and how we communicate what we "mean".*

—Doris Herrick



Zettel
Ludwig Wittgenstein
Edited by G.E.M. Anscombe & G.H. von Wright
1967; 124pp. in parallel German/English text
$2.65 postpaid
from:
Univ. of California Press
2223 Fulton St.
Berkeley, CA 94720
or Whole Earth

10. Suppose I wanted to replace all the words of my language with other ones; how could *I* tell the place where one of the new words belongs? Is it images that keep the places of the words?

•

70. Being able to do something seems like a shadow of the actual doing, just as the sense of a sentence seems like the shadow of a fact, or the understanding of an order the shadow of its execution. In the order the fact as it were "casts its shadow before". But this shadow, whatever it may be, is not the event.

•

55. Like everything metaphysical the harmony between thought and reality is to be found in the grammar of the language.

•

64. I whistle and someone asks me why I am so cheerful. I reply "I'm hoping N. will come today",—— But while I whistle I wasn't thinking of him. All the same, it would be wrong to say: I stopped hoping when I began to whistle.

•

160. The way music speaks. Do not forget that a poem, even though it is composed in the language of information, is not used in the language-game of giving information.

•

256. Philosophers who think that one can as it were use thought to make an extension of experience, should think about the fact that one can transmit talk, but not measles, by telephone.

•

327. Compare: inventing a game—— inventing language—— inventing a machine.

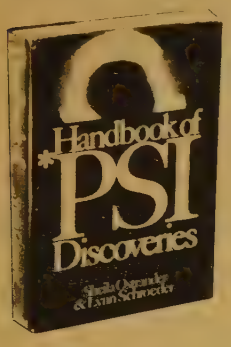
•

Handbook of PSI Discoveries

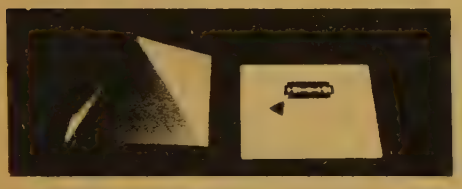
An informed and informal guide for doing your own parapsychological experiments. It is filled with projects, experimental designs, and how-to-do-it suggestions for those who are tired of reading about this whole area and would like to check it out personally. The ideas range from replications of well-controlled laboratory experiments to psychic versions of poker and bridge. A long section on "where to find it" gives a full and often technical description of journals, patents, products and processes.

If you wish to test and develop your own capacities, there are a variety of sensible training procedures laid out. The book has nothing to offer the skeptic, little to awe the wide-eyed believer. It is a wonderland for the tinkerer, and the home gadgeter.

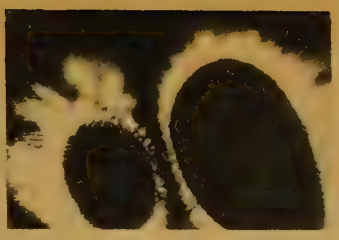
—Jim Fadiman



Handbook of PSI Discoveries
Sheila Ostrander and Lynn Schroeder
1974; 336pp.
$8.95 postpaid
from:
G.P. Putnam's Sons
200 Madison Ave.
New York, NY 10016
or Whole Earth



The Czechoslovakian original red and white plastic pyramid for razor-blade sharpening. It stands slightly less than three inches tall. (Base of triangle: 11.4 centimeters, side: 10.8 centimeters.)



As fingertips of two different people near, rather rather than intermingling, flares usually draw back.

Razor-Blade Sharpening

The old-fashioned blue blades are the ones that deliver results. Place a blunt blade on a two-inch match box or other holder directly under the apex of a six-inch pyramid. Sharp sides face east-west, the ends north-south. Leave it there at least a week, longer if it doesn't prove ready. On removal, it should again give you smooth shaving. Replace blades under pyramid regularly after each use. Drbal claims up to 200 shaves with a single blade.

Probing for Energies

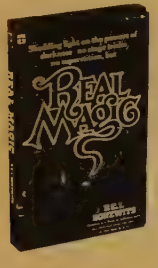
If you are using your pyramid as an experimental tool, some of the avenues you might try include:

- Reflecting the energy by the use of mirrors. Does it follow the laws of light reflection?
- Shielding or cutting off the activating force. Place a plane of glass, metal screening, or other substance a few inches above the pyramid. Can you find any material that when made into a pyramid nullifies the usual effect?
- Seeking a polarity in the supposed pyramid energy. Is there a negative and positive? It has been suggested that there is a different sort of energy operating in the upper part of the pyramid. To get anywhere one would have to make the polarities visible by some sort of effect.
- Testing capstones of various material. No one knows definitely what comprised the capstone of the Great Pyramid. Edgar Cayce in one of his readings said it was made of an alloy of copper, brass and gold.
- Creating a pyramid from alternating layers of organic and inorganic material—— in other words, following the orgone-accumulating pattern propounded by Wilhelm Reich.

Real Magic

Thanks to American Indians I believe in magic. Further thanks to them, I also believe in trouble, which messing with magic will get you into. This recent book is a fine broth of youthful folly.

—SB



Real Magic
P.E.I. Bonewits
1971; 271pp.
$ .95 postpaid
from:
Berkley Pub. Corp.
390 Murray Hill Parkway
East Rutherford, NJ 07073
or Whole Earth

How to Cast a Lust Spell

There is a particular person you *really* want to go to bed with, but he or she isn't interested. If I have to tell you what the appropriate emotion for *this* spell is, you don't really want to bother. Just don't get this confused with a Love Spell.

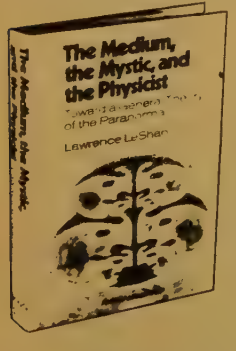
Again you use the multimedia approach; you surround yourself with the sounds, smells, lights, textures, and colors that remind you of pure, adulterated lust! You get a good image of the *target*, and then begin to change it. You image the *target* as passionately assuming a sexual position, ready and willing. Once again you concentrate 100 percent upon your emotion, *target*, and expected result. Once again you should continue until you feel the spiraling energy of your thoughts getting louder and stronger. Wait as long as you can to build up your lust to its peak, and then *fire!*

A physical orgasm at the time of *firing* will actually help (but not before). As for follow-through, use your imagination.

The Medium, the Mystic, and the Physicist

As a biologist, I think LeShan is barking up the tree. The greatest parallel between physicists and psi researchers is the bafflement they share about what the hell's going on. Still, focussed frustration can yield some surprises. And they're worth more than the phenomena.

—SB



The Medium, the Mystic, and the Physicist
(Toward a General Theory of the Paranormal)
Lawrence LeShan
1966; 299pp
$ 8.95 postpaid
from:
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022

Try to determine which of the following quotations (taken from the experiment) were written by mystics and which by physicists.

1. "The stuff of the world is mind-stuff."
2. "The reason why our sentient, percipient, and thinking ego is met nowhere in our world picture can easily be indicated in seven words: because it is ITSELF that world picture. It is identical with the whole and therefore cannot be contained in it."
3. "It is the mind which gives to things their quality, their foundation, their being."
4. "It is necessary, therefore, that advancing knowledge should base herself on a clear, pure and disciplined intellect. It is necessary, too, that she should correct her errors, sometimes by a return to the restraint of sensible fact, the concrete realities of the physical world. The touch of Earth is always reinvigorating to the Sons of Earth. . . . It may even be said that the super-physical can only keep our feet firmly on the physical."
5. "Thus the material world . . . constitutes the whole world of appearance, but not the whole world of reality; we may think of it as forming a cross section of the world of reality."
6. "As far as the laws of mathematics refer to reality, they are not certain, and as far as they are certain, they do not refer to reality."
7. "Pure logical thinking cannot yield us any knowledge of the empirical world; all knowledge of reality starts from experience and ends in it. Propositions arrived at by pure logical means are completely empty."

No. of Quotation	*Source*
1.	Physicist—— Sir Arthur Eddington
2.	Physicist—— Erwin Schrodinger
3.	Mystical Document—— The Dhammapada
4.	Mystic—— Sri Aurobindo
5.	Physicist—— Sir James Jeans
6.	Physicist—— Albert Einstein
7.	Physicist—— Albert Einstein

Parapsychology: Sources of Information

Psi researchers rejoice. Here is a fully annotated compendium of the entire psi literature. Nice service by the American Society for Psychical Research.

—SB

Parapsychology: Sources of Information
Rhea A. White and Laura A. Dale
1973; 302pp.
$7.50 postpaid
from:
Scarecrow Press, Inc.
52 Liberty St.,
P.O. Box 656
Metuchen, NJ 08840

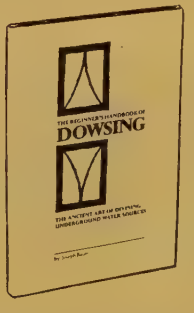
Ebon, Martin (ed.). **Test Your ESP**. New York: New American Library, 1971. 143pp. $.75 (pap); Hollywood, Cal.: Wilshire, 1971. $2.00 (pap) (Orig. publ. by World in 1970. Hardcover ed. OP)

The editor points out in the Foreword that in ESP testing "it isn't the equipment that counts. What matters are the controls exercised during a test, and just how the results are evaluated. You can arrange perfectly tight and scientifically acceptable experiments in your own living room" (p.v). This handbook was compiled in collaboration with the staff of the Institute for Parapsychology of FRNM and it presents in non-technical language various methods of ESP and PK tests. The first three chapters are on ESP testing in general. Other chapters cover such topics as testing children, the use of photographs and drawings as targets, testing animals, psi-missing, "party games," and PK tests. There is also a chapter on investigating haunted houses. 32-item glossary; "Suggested reading" (11 items).

The Beginners Handbook of Dowsing

Extra-soft Technology. Bring up the subject of Dowsing and you're sure to start an uproar. Everyone has an opinion, and stories. I tend to be a skeptic, but have seen some things that are very hard to explain, and I'll admit that every well I've seen dowsed has come in. If you think dowsing is the way to go, this little manual explains one man's way of doing it. I'm sure a lot of what he says is highly controversial, even to other dowsers, but his directions are clear enough and presented firmly. Included is a history of dowsing. You can also join the American Society of Dowsers, Inc., Danville, Vermont, 05828 and get their magazine "The American Dowser." (Also see Pg 72).

—JB



The Beginner's Handbook of Dowsing
(The Ancient Art of Divining Underground Water Sources)
Joseph Baum
1974; 34pp.
$2.95 postpaid
from:
Crown Publishers, Inc.
419 Park Ave. South
New York, NY 10016

If two or more dowsers are present, the following routine can be both fun and impressive to nonbelievers. One dowser, completely hidden from the view of the other, walks in a straight line until the rod dips. Mark this spot carefully in such a manner so that the other dowser will not be able to see the marker. Continue in this way until the first dowser has marked off four or five spots. If you now start the second dowser on the same path, his rod will invariably dip at the same spots that were selected by the first dowser. This is a pretty strong argument against those who still believe that it's all a fraud.

Pursuit

Be sure to include a word about PURSUIT, Society for the investigation of the unexplained. They research things like the Bermuda Triangle, pre-earthquake phenomena, a large Chinese Pyramid, and other unexplainable realities. Started by the late Ivan T. Sanderson. They are located in Columbia, NJ 07832, Telephone: 201-496-4366. Don't miss these people they are professionals. They do alot of debunking. **Pursuit** is a bi-monthly mag. about their research, it costs $10/yr.

Sincerely
Steve Paige
Arroyo Grande, CA

GO BOOKS

by Sumiko Okimoto

The Ishi Press, Inc. (Box 1021, Berkeley, Calif. 94701) publishes the best regarded series of English language books on Go, with something available for each level of player. Start with **Go for Beginners** (1972; 151pp.; $2.50) and **Basic Techniques of Go** (1969; 170pp., $3.00), to move through the fundamentals of the game and assimilate a range of basic techniques and strategies. For the more experienced, **38 Basic Joseki** (1973; 244pp., $3.75), provides a selective sampling of openings for Go games—— developing these skills is a must if you wish to become a serious Go player. For still more advanced students of the game, **Strategic Concepts of Go** (1972; 140pp., $6.00), explains a conceptual framework encompassing all aspects of Go, difficult to grasp until you've played extensively and at a rather sophisticated level. At this stage, there are several "for fun" books you might want to acquire. **Go: International Handbook and Dictionary** gives a rundown (in German and English) on what's happening in the Go world: best players, location of Go clubs, reports of various tournaments, and a glossary of Go terms. **The 1971 Honinbo Tournament** (1972; 206pp., $7.00) analyzes a series of fourteen Go games leading up through the Honinbo tourney (oldest in Japan), with commentary on plays and strategies. It is useful for understanding a variety of playing styles; even beginners with a basic grasp of Go can pick up pointers and improve their game by following these championship matches. The very advanced player will also enjoy **Go Proverbs Illustrated** (by Kensaku Segoe, published by the Japan Go Association, available from Ishi Press; 1960; 262pp., $6.75)—— strategic points based on traditional Go sayings. Slated for completion in 1974 are six more books on Go from Ishi Press, covering every aspect of the game at a basic level.

Go Proverbs Illustrated

Six die, eight live, and four die, six live.
On the third line, four die, six live.
In the corner, five stones in a row on the third line are alive.
For rectangular six in the corner, da-me is necessary.
The comb formation is alive.
For the comb formation in the corner, da-me is necessary.
The carpenter's square becomes ko.
If there is no stone on the handicap point, the carpenter's square is dead.

There is death in the ha-ne.
Strange things happen at the one-two point.
If a formation is symmetrical, play at the center.
Against three in a row, play right in the center.
The enemy's key play is my own key play.
The semeai where only one player has an eye is a fight over nothing.
There are times when even a fight over nothing means something.
In a se-me-ai attended by Ko take it last.
Learn the eye-stealing tesuji.
Don't make empty triangles.
Don't make compact groups of stones.
At the head of two stones in a row, play ha-ne.
At the head of three stones in a row, play ha-ne.
Play cross-cut against the small knight.
Tight connections, diagonal connections, and knight's move connections.
If your stone is capped, play the knight's move.
Beware of the clumsy double contact.
Don't play in direct contact with the opponent's stone caught in your squeeze-play.
Don't play adjacent to a cutting-point.
Capture what is cut off.
Never try to cut bamboo joints.
If you have one stone on the third line, add another, then abandon both of them.
Beware of going back to patch up your plays.
The monkey jump is worth eight points.
If you don't understand the ladders, don't play go.
The poor player plays the opponent's game for him.
If you have lost four corners, resign.
Pon-nuki is worth thirty points.
One point in the center is worth ten in the corner.
To reduce an opponent's large prospective territory, strike at the shoulder.
If you plan to live inside enemy territory, play directly against his stones.
Knight's moves win running battles.
When your opponent has two weak groups, attack them both at once.

Go Catalog

A nice selection of books, boards, and stones. Send 25¢ to East Asia Book & Game Center, Box 24351, Oakland, CA 94623.

Consider also the American Go Journal, *$7/yr, or* Go Quarterly Review, *$15/yr., from: American Go Association, Box 397, Old Chelsea Station, NY 10011.*

—SB

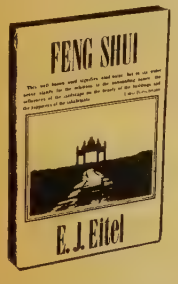
Feng Shui

Feng Shui is the traditional Oriental science of ecology and landuse planning which for thousands of years has preserved the landscape in the Far East in spite of high-density population. Since we cannot keep our landscape viable even with all our space, there's a lot to learn from the Chinese.

—William Wroth

This fascinating tiny book was written in 1873. Anybody know of anything more recent?

—SB



Feng Shui
E.J. Eitel
1873, 1973; 84pp.
$2.32 postpaid
from:
The Land of Cokaygne Ltd.
1, Jesus Terrace
New Square, Cambridge
England

Generally speaking, all straight lines are evil indications, but most especially when a straight line points towards the spot where a site has been chosen.

•

Water is in the Feng-shui system always looked upon as the emblem of wealth and affluence. Where the water runs off in a straight course, it will cause the property of people dwelling there to run off and dissipate like water. Tortuous, crooked lines are the indications of a beneficial breath, and will serve to retain the vital breath where it exists.

•

The best means to keep off and absorb such noxious exhalations is to plant trees at the back of your abode and keep a tank or pond with a constant supply of fresh water in front of your house. This is the reason why in South China every village, every hamlet, every isolated house has a little grove of bamboos or trees behind and a pond in front.

INFO

The International Fortean Organization. It has a quarterly journal reporting and speculating about weird events. $6/yr. from: Box 367, Arlington VA 22210. £1.80/yr from: Robert J. M. Richard, 31 Kingswood Rd., Moseley, Birmingham B13 9AN England. Charles Fort was an abominable snowman.

—SB

PART THREE

THE PARTING ADVICE OF SAY WHEN DADDY

Into the plush New York office of Buff Mogul Productions walks a secretary carrying a tray with four already-rolled marijuana joints. Tongue Fu, Buff Mogul, Sam Peckerpal and Albert Morse Code each take one, light up and continue their conference.

Buff Mogul: "You wanna make a suicide film? You mean you would actually kill yourself right on camera? You'd miss opening night and all the reviews and everything."

Albert Morse Code: "There's a legal question to be considered here. It's against the law to commit suicide. That may not make any difference to you, Tongue Fu, but we could be charged with being accessories after the fact."

Sam Peckerpal: "Doesn't it depend on how he plans to do it? If he wants to jump off the cliff, we could have a stunt man do that, and then Tongue Fu could commit suicide on his own without involving any of us."

Tongue Fu: "You have sworn to me that I would get complete artistic freedom. The film would be a fake if I did not take my life at the end of it."

Buff Mogul: "Unless you change your mind, right? Listen, you guys, I'm willing to gamble on it. I mean if he has such a strong desire to communicate that he's gonna postpone his suicide for six months— "

Albert Morse Code: "Oh, there's another thing. Now, Tongue Fu, I know it's about your life, but you're gonna have to compromise on certain scenes. Or are we all prepared to settle for an X rating?"

Sam Peckerpal: "Settle? That's what brings in the audiences. I have an idea about the female lead, though. I think we should have an unknown actress do Rosebud, if only for the sake of image credibility. But we're gonna have one fuckuva casting problem for Captain Mediafreak and Chocolate Graham."

Tongue Fu: "They have agreed to play themselves."

He swivels around in his chair and looks directly at us for the first time.

"Oonga boonga, Patoonga. Everything you have seen so far is my suicide film. It has been reconstructed from that which I have experienced or observed. Plus what I have learned from conversation with others. The dialogue between Primo Columbian, Notary Sojak and the Chief Coordinator was based on notes that Columbian took at their meeting. They were written on the inside cover of his notepad, which I picked up at the amusement park in Oregon. Columbian threw his cover away because the divine vomit of Guru Golly Ji had found it.

"Ah so. Buff Mogul said six months ago that I might change my mind about committing suicide. I have not. I am unable to stop thinking of Rosebud Zwalyimeh. A Patoonga priest is not supposed to have any attachments. But everything I do aches with the lack of Rosebud. Life itself reminds me of her. Only my own death can do honor to such grief. But there is one more thing I must do first.... "

Flashiebackie:

"I shall no longer call you Anteater," Say When Daddy is telling Tongue Fu. "You are fully matured now."

"Does this mean I am ready for America?"

The blind old man holds out his fist and opens it.

"Quickly, snatch this peyote button"— Zeeeeep!— from my hand." Before Say When Daddy can even finish that sentence, his palm has been emptied by a tongue of almost invisible swiftness. "Time to go, Tongue Fu. Let your hair grow out."

"What shall I do with this peyote button?"

"Bring it with you. This is not an ordinary peyote button. It is the essence of thirteen peyote buttons, each of sacramental dosage, freeze-dried in our own monastery. You must save this for a time, should it ever come, when you are preparing to take your own life because of failure to uphold Patoonga tradition.

"Not that tradition is all. But as a Patoonga priest you have been trained to maintain a constant balance between tradition and change. Thus, the more you are aware of your personal existence, the more you should simultaneously be aware of your personal non-existence.

"As a Patoonga priest you have been taught not to believe in Heaven or Hell because these places cannot be proven to exist. But this special peyote button will enable you nonetheless to experience Heaven or Hell before you take your own life. I was once ready to commit Hari-kiri, but my curiosity to taste the journey this sacred button could provide, dissolved my compulsion.

"I did not want to give up my option of committing suicide by committing suicide. There is no guarantee that you will have the same result. Now, if you'll excuse me, I have to take a good healthy crap, Sometimes it is more blessed to take than to give.... "

"And after I take my peyote button," Tongue Fu is telling us, "I shall end this film. I do not know yet how I will take my life, but— "

The voice of Buff Mogul says, "Can't you hold off with the peyote till Thursday so you can attend that Beautiful People party tomorrow night?"

The voice of Albert Morse Code says, "Are we gonna film the party too as long as Tongue Fu will be there?"

The voice of Sam Peckerpal says, "Cut! Cut! Couldn't you jerks wait with your dumb questions? All right, take two on the suicide speech!"

Tongue Fu turns to them and says, "No, wait. Let it stay this way."

"He turns back facing us and continues: "I do not know yet how I will take my life, but it will not be a way that would disfigure me. I recall that Judy Garland requested a certain makeup artist for her corpse. I would like someone from the circus to give me the face of a clown. Those who pass my casket would do so with a smile. That would be a way to better my exit and not hurt anyone.

"But I also do not wish to take up unnecessary space in the earth. So then I could be cremated. And then my family— Captain Mediafreak and Chocolate Graham— could mix my ashes with marijuana and smoke me.... "

The voice of Sam Peckerpal says, "Hey, c'mon, Tongue Fu, we should shoot this scene again just for the sake of consistency. Shit, we're not doing cinema verite here, y'know."

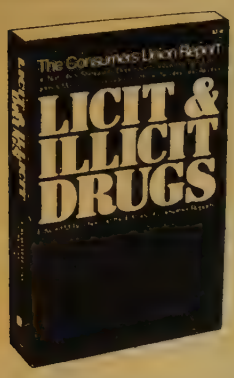
The voice of Albert Mose Code says, "Yes, we are, for the party scene. Hey, Tongue Fu, are you gonna bring a date?... "

[Continued, page 743]

Licit & Illicit Drugs

The **Consumer Reports** *rundown on drugs—— critical, intelligent, full of news. There's no better general book anywhere on all the brain-drugs——including nicotine and alcohol.*

—SB



Licit & Illicit Drugs
Edward M. Brecher & The Editors of Consumer Reports
1972; 623pp.
$3.95 postpaid
from:
Little, Brown & Co., Inc.
200 West St.
Waltham, MA 02154
or Whole Earth

A conscientious search of the United States medical literature throughout recent decades has failed to turn up a single scientific paper reporting that heroin overdose, as established by these or any other reasonable methods of determining overdose, is in fact a cause of death among American heroin addicts. . . But, beginning about 1943, a strange new kind of death began to make its appearance among heroin addicts. The cause of this new kind of death was not known, and remains unknown today—— though it is now quite common.

A striking feature of this mysterious new mode of death is its suddenness. Instead of occurring after one or more hours of lethargy, stupor, and coma, as in true overdose cases, death occurs within a few minutes or less—— perhaps only a few seconds after the drug is injected. Indeed, "collapse and death are so rapid," one authority reports, "that the syringe was found in the vein of the victim or on the floor after having dropped out of the vein, and the tourniquet was still in place on the arm." This explains in part why nalorphine and other narcotic antagonists, highly effective antidotes in true opiate overdose cases, are useless in the cases falsely labeled overdose.

An even more striking feature of these mysterious deaths is a sudden and massive flooding of the lungs with fluid: pulmonary edema. In many cases it is not even necessary to open the lungs or X-ray them to find the edema; "an abundance of partly dried frothy white edema fluid [is seen] oozing from the nostrils or mouth" when the body is first found. . . . Janis Joplin's death, of course, was popularly attributed to "heroin overdose." If the alcohol-barbiturate-heroin theory is correct, her fatal injection of heroin while drunk on alcohol was the prototype of many other deaths similarly mislabeled "overdose."... It might prove absurdly easy to confirm the alcohol-barbiturate hypothesis. All that might be necessary would be to addict a few monkeys or other primates to heroin, intoxicate them on alcohol or barbiturates, and then inject modest doses of heroin. If the monkeys drop dead of Syndrome X, a warning against shooting heroin while drunk on alcohol or barbiturates might save many hundreds of lives a year throughout the world.

Pharm Chem

For us dopers this is a critical service. Accurate analysis for $5 of any drug you send them (whilst preserving your anonymity). And a monthly newsletter of what they're finding (misrepresentation, that's what). In the Bay Area the conservative newspaper prints their findings weekly.

—SB

Pharm Chem Laboratories
1848 Bay Road
Palo Alto, CA 94303

Analysis Anonymous is a drug analysis service that provides the public with unbiased, confidential information about the true content of illicit ("street") drugs. Particularly disturbing characteristics of the burgeoning street drug phenomenon are the continual appearance of new substances, widespread availability of dangerously adulterated and poorly synthesized drugs and intentional deception by illicit drug dealers. Test results on over a thousand drug samples submitted from throughout the United States have demonstrated the gross misrepresentation of drugs sold on the street. This flagrant discrepancy between the alleged and actual content of street drugs undoubtedly increases the number of overdoses and adverse reactions experienced by others; it also contributes to the dissemination of false and unreliable information about the effects of these drugs. Drug abuse professionals, educators, drug users and all others concerned with the "drug problem" are encouraged to support this service.

ON THE STREET
(1972)

Alleged Content	Actual Content	Description	Origin	Street Price
1. psilocybin	LSD	orange powder wrapped in paper	San Francisco County	—
2. psilocybin	LSD	orange-brown powder wrapped in paper	San Mateo County	—
3. mescaline	LSD	orange powder in clear capsule	Santa Clara County	$3.00
4. LSD	LSD	pink tablet	San Mateo County	$1.00
5. mescaline	LSD	yellow-brown powder in clear capsule	San Mateo County	$2.50
6. LSD	LSD	bright orange pellet; street name "sunshine"	San Mateo County	$2.00

How to Use Analysis Anonymous: Wrap the sample in tissue or other suitable material, place it in an envelope with $5.00 (cash or money order) and include either a 6-digit sample identification number of your choice or a return address. Mark the envelope "Hand Cancel" and mail it to our address below. (Please do not choose numbers such as 123456 or 666666). Also include information about alleged content, street price, origin of sample (city, state) and indicate whether any undesirable side effects are known. To obtain the results, telephone the laboratory (415/322-9941) 4-5 days after mailing and ask for a report, using your 6-digit number; or we will send a written report to the return address. If you are sending more than one sample, wrap each separately or mail in separate envelopes.

Pharm Chem's philosophy is that ANALYSIS ANONYMOUS should benefit as many people as possible. Reporting the test results of a particular drug only to the individual who submitted it is of limited value. Consequently, results are periodically published in the PharmChem newsletter.

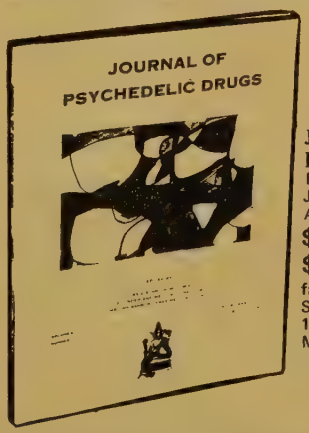
The PharmChem Newsletter *provides its readers with test results, including the alleged content, actual content, description of the dosage form, city of origin and street price on all drug samples submitted. It also features a detailed report on a specific drug. This publication is unique and effective in providing drug abuse professionals with pertinent information on emerging trends in the illicit drug market. The Newsletter is distributed free to anyone who requests a subscription.*

COCAINE——Consistent with our past experience, the "street" price of cocaine is in no way indicative of its quality. At an average price of $50/gm, we have seen the complete range of purity; from 1% cocaine to pure cocaine hydrochloride (cocaine is almost always marketed as its hydrochloride salt). Many times, the cocaine is adulterated with other local anesthetics such as xylocaine, procaine, and benzocaine, rewarding the dealer with extra profits. Although the majority of users insist on high purity cocaine, they often fail to realize that pure cocaine, if "snorted" over a period of time, can lead to ulceration and perforation of the nasal septum. Intravenous use of cocaine can be particularly dangerous, especially if the "coke" is cut with other local anesthetics.

Journal of Psychedelic Drugs

The best technical journal on dope. Put out by the Haight-Ashbury Free Medical Clinic, Dr. David Smith presiding.

—SB



Journal of Psychedelic Drugs
David E. Smith, M.D., James R. Gamage, Alice Q. Swanson, eds.
$20.00 /yr (quarterly)
$5.00 single copies
from:
Stash Press
188 South Bedford St.
Madison, Wisc. 53703

In sum, the portrait of the addict derived from these data is of an individual who is typically impulsive, immature, lacking in awareness of the realities of daily existence, feeling no responsibility for his deeds, operating from the model of a non-coping male parent, and coming from a home atmosphere which stressed conformity and superficiality in interpersonal relations. If this picture is valid, then it is not surprising that those who work with the addict should be struck by their marked lack of self-esteem.

Cream Rises

DOPE

The Botany and Chemistry of Hallucinogens *Psychoactive alkaloid omnibus* 739

Pharm Chem *Anonymous drug analysis* 738

20th Century Alchemists *Finding, preparing good dope* 497,738

Licit and Illicit Drugs *The scene* 738

The Cultivator's Handbook of Marijuana *Basic manual* 62

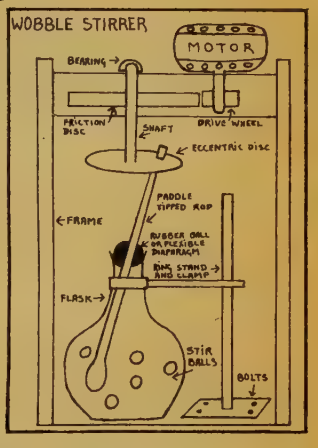
How to Grow Marijuana Indoors *Where it's safer* 497

Basic Drug Manufacture

The most straight-forward "how-to" book of the psychedelic world. Very heavy chemistry excellently outlined. Friendly sections on "watched" chemicals, safety while working in the lab, and avoiding the narcs.

—PW

Basic Drug Manufacture
The Twentieth Century Alchemists
32pp.
$2.00 postpaid
from:
Level Press
700 Diamond St.
San Francisco, CA 94131
or Whole Earth



MDA

In a flask combine 34 g 30 % hydrogen peroxide solution with 150 g 80 % formic acid. In a second flask dissolve 32.4 g isosafrole in 120 ml prechilled acetone. Cool both flasks in ice water bath to about 10° C. Fit a separatory funnel or drop funnel to the first flask and add contents of second flask dropwise through funnel to first flask while stirring contents of first flask with magnetic stirrer. Continue stirring for 2 hours. Let stand for 16 hours. More ice need not be added. Allow to rise to room temperature. Evaporate to dryness using vacuum and no heat. Rotary evaporator with vacuum is ideal. Prepare a mixture of 360 g 15 % sulfuric acid and 60 ml methanol. Dissolve 60 g residue in this and heat on water bath for three hours. After this cool mixture by carefully adding small portions of ether or benzene a little at a time and stirring between additions. Be cautious of sudden fumes. Use aspirator if possible. Wash the extraction in a separatory funel with water and 5 % sodium hydroxide solution. Evaporate to dryness using vacuum and no heat. Should yield about 20 g 3,4-methylenedioxybenzylmethyl ketone (bp$_2$ 108-112°C). Dissolve 20 g of the ketone in 56 g formamide and heat at 190°C for 5 hours. Let cool to room temperature. Add 87 ml hydrogen peroxide solution. Extract in separatory funnel with three 100 ml portions of benzene. Combine benzene extracts and evaporate to dryness using vacuum and no heat. Prepare a mixture of 7 ml methanol and 40 ml 15 % hydrochloric acid. Dissolve residue in this. Heat on water bath for 2 hours. At this point a somewhat impure final product may be achieved by evaporating this solution with vacuum and collecting the residue. Or: Basify solution with saturated potassium hydroxide solution, extract in separatory funnel with three 80 ml portions of benzene, and evaporate benzene extracts using vacuum to leave an oily residue of about 10 g 3,4-methylenedioxyamphetamine (MDA).

Grassroots

If you're professionally involved in illicit drugs, it's probably worth the $95/yr to receive all the latest dope on dope—— research findings, updated annotated roster of drug-help centers, etc. Thorough service.

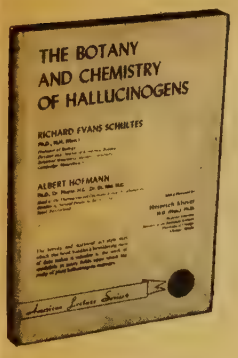
—SB

Grassroots
118 South Bedford St.
Madison, Wisconsin 53703

The Botany and Chemistry of Hallucinogens

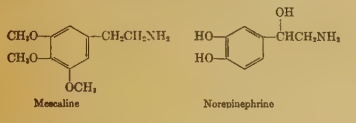
This is the first and only scholarly book by one of the greatest ethno-botanists and the inventor of LSD. It is the "classic" text with academic style and dense information. If you want chemistry, botanical systematics and a smattering of anthropology—— this book will not go out-of-date for many years.

—PW



The Botany and Chemistry of Hallucinogens
Richard Evans Schultes and Albert Hofmann
1973; 267pp
$14.75 postpaid
from:
Charles C. Thomas, Pub.
301-327 East Lawrence Ave.
Springfield, IL 62717
or Whole Earth

This structural similarity between the most important hallucinogenic compounds of plant origin and neuro-hormones which play an essential role in the biochemistry of psychic functions is probably not accidental: perhaps, it might explain the hallucinogenic activity by mutual influence on the active sites of the central nervous system.



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Peyote intoxication, caused by one of the most highly complex and variable of all hallucinogenic plants, is characterized especially by indescribably brilliant coloured visions in kaleidoscopic movement. These visual hallucinations, attributed to mescaline, which is one of the many alkaloids in the plant, are often accompanied by auditory, taste, olfactory and tactile hallucinations. Sensations of weightlessness, macropsia, depersonalization, doubling of the ego, alteration or loss of time perception and other rather unearthly effects are normally experienced. The very real, and often overlooked, difference between peyote intoxication and mescaline intoxication must constantly be borne in mind. Amongst aboriginal users, it is the dried head of the cactus, with its total alkaloid content, that is ingested; mescaline applied orally or by injection is employed only experimentally and then produces the effects of but one of the alkaloids, without the physiological interaction of the other bases present in the crude plant material. Consequently, descriptions of the visual hallucinations found in reports of psychological experiments should not necessarily be too closely equated with the effects experienced by native peyotists in their ceremonies.

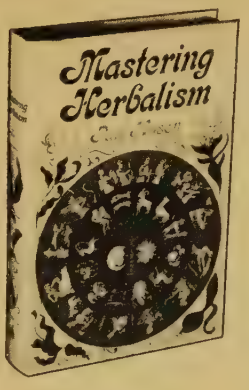
•

It is interesting that, once the hallucinogenic properties of the Mexican morning glories became common knowledge, certain fringe groups in European and American society began to ingest convolvulaceous seeds, mainly those of the horticultural varieties of sundry morning glories, procuring their supplies chiefly from the nursery and garden industry. This abuse grew so serious at one time that, in certain areas, methods for control have been adopted and enforced by public health officials. Many horticultural varieties are devoid of the psychotomimetic alkaloids, but some, such as "Heavenly Blue," "Pearly Gates" and others contain the same intoxicating principles that are found in the narcotic Mexican morning glories.

Mastering Herbalism

Looks like the one herb book to have instead of a lot of others. Good for Huson: he evaluates in detail the service of twenty-four herb suppliers in the U.S. and United Kingdom. That thoroughness prevails throughout.

—SB



Mastering Herbalism
Paul Huson
1974; 371pp.
$10.00 postpaid
from:
Stein and Day, Inc.
Scarborough House
Briarcliff Manor, NY 10510
or Whole Earth

Properties. Camomile contains, among other things, calcium, tannic acid, glucoside, and anthemic acid. It is used chiefly for aiding upset stomachs, as a tonic infusion, and as a gentle *nervine*. In older herbalists' language, this means simply a medicine that acts on the nerves—— what today we would call a tranquilizer. It also happens to make a really delicious tea.

How to Use It

Camomile Tea: Infuse 1 ounce dried blossoms for 15 minutes in 1 pint boiling water. For a single cup, infuse 1 teaspoon flowers in 1 cup boiling water. Strain and flavor with honey if desired.

Note: As the value of camomile rests chiefly in its volatile essential oil, always make sure the container in which you make your infusion is covered while in use, not an open cup.

•

World Wide Herbs Ltd.
11 St. Catherine St. East
Montreal 129, Canada

World Wide's catalog will come to you free on request, and contains the widest selection of dried herbs and spices I have yet to see. Also included on their list are all sorts of interesting no-no's like henbane and real mandragore. I sent off for some, and amazingly received the mandragore, although the henbane never made it (I received a little credit note with "XXX stringent new U.S. Government Regulations now prohibit the exportation of poisonous herbs to the USA" stamped beside the henbane entry).

Besides a variety of ginseng teas and roots, World Wide carries a fine selection of herbs and mordants for dyeing with, books, and last but certainly not least a long comprehensive list of essential oils. (You will have to request this when you write.) They carry such treasures as cedarleaf, cubeb, hemlock, myrtle, various nerolis, including the finest (at $1182.72 per pound, for those interested), petitgrain, real rose otto ($1360.15 per pound), a very reasonably priced rosemary, vetivert, and ylang ylang.

•

Margaret Bruce
Helmington Old Inn
Hunwick Crook Co.
Durham, England

If you are into English witchery, then there is no way you can ignore Margaret Bruce. As a doyenne of the British occult scene, Miss Bruce's name has long been a byword among Those Who Know. The selection of herbs, incenses, and gums she offers in her attractive catalog are nearly all angled toward the occult in one way or another, and they include just about everything that magical (Miss Bruce would spell it "magickal") practitioners could desire, from abramelin oil to rowan twigs (but, alas, no hemlock). She also offers over fifty old-time perfumes, which she blends herself from recipes dating back to the eighteenth century; among these are delicious and potent musk and civet scents of her own devising. As she includes dollar prices alongside the English ones, she presumably exports to the United States.

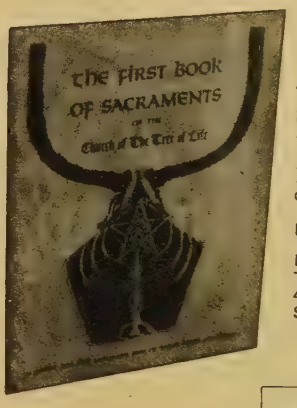
Miss Bruce claims her sachet herbs are culled at the correct planetary hour and lunar phase. Her catalog used to cost 3 shillings, and presumably now costs around 15 pence of the new British money.

•

Church of the Tree of Life

A wonderful church dedicated to the preservation of the human imagination, the spiritual and totemic life of plants and the democracy of us as universal organic chemistry. **The First Book of Sacraments** *lists plants they have declared religious sacraments and therefore may be free from Federal narcotic laws (re: Navajo peyote). The* **Bark Leaf** *has up-to-date information on the status of plants and chemicals as free citizens in the USA.*

—PW



The First Book of Sacraments
1972; 30pp.

Bark Leaf
quarterly bulletin

Please donate generously

Both from:
Tree of Life Press
451 Columbus Ave.
San Francisco, CA 94133

KAVA *(Piper methysticum)*

A sacrament for welcoming special guests and relaxing with friends and family.

Other names: kava-kava, ava, ava-ava, kawa, kawa-kawa, awa, yaqona, yangona, wati, Rauschpfeffer, keu, macropepper.

This perennial shrub of the Pepper family (Piperacae) grows throughout the South Pacific islands the Hawaiian Islands, and New Guinea. It grows between six and eight feet tall and is usually found both cultivated and growing wild in cool moist highlands up to 1000 feet above sea level. Although the leaves are used medicinally it is mainly cultivated for the roots. From these a potent beverage may be prepared.

The active components in kava are six resinous alpha

Kava (Piper methysticum)

pyrones: kawain, dihydrokawain, methysticin, dihydromethysticin, yangonin, and dihydroyangonin. None of these is water-soluble except when emulsified. They are soluble in alcohol, oil, and other fat solvents.

There are two major ethnic methods of kava preparation: The Fiji method and the Tonga method. The Fiji method is to crush the flesh inside the root bark and soak it in water for several hours until the infusion turns cloudy. This produces a pleasant beverage with excellent tonic and mild stimulant effects. The Tonga method requires that the root first be chewed before soaking in water. Saliva emulsifies the non-water-soluble pyrones so that they may be extracted into the water and assimilated into the drinker's body.

The result of this is a potent beverage which in small amounts produces a state of euphoria and in large amounts causes extreme relaxation, lethargy of lower limbs and eventually sleep. Since it depresses spinal rather than cerebral activity it does not impair mental alertness. One often has visual and auditory hallucinations. People under the influence of kava are usually cheerful and friendly.

Field Guide to the Psilocybin Mushroom

This pamphlet beautifully supplements, but does not replace, Leonard Enos' **A Key to the American Psilocybin Mushroom** *(Pg. 81). It has sections on growing three common species (of the 15 found in the US) and an easy key to these three species. These species are predominantly found in the Southeast but can be found on manure in many other localities. See Pg.* **475** *for books on mushroom identification.*

—PW

Field Guide to the Psilocybin Mushroom
F. C. Ghouled
1972
$1.25 postpaid
from:
Guidance Publications
PO Box 15667
New Orleans, LA
or Whole Earth

I Never Promised You a Rose Garden

This must be one of the least reviewed and most persistent best sellers in history. It is the true account, lightly fictionalized, of a young girl's three years in an insane asylum, stone mad. I've read it twice. College students devour it. I don't know exactly why. It cuts through a world of bullshit. "Dr. Fried", the therapist in the story, was Frieda Fromm-Reichmann no less. Two heroines, these women.

–SB

I Never Promised You a Rose Garden
Joanne Greenberg
(Hannah Green)
1964; 255pp.
$1.25 postpaid
from:
Signet Books
The New American Library, Inc.
1301 Ave. of the Americas
New York, NY 10019
or Whole Earth

She began to thrash again, even though she was exhausted. "I'm all stopped and closed. . . like it was before I came here. . . only the volcano is burning hotter and hotter while the surface doesn't even know if it is alive or not!"

The doctor moved closer. "It is one of these times," she said quietly, "when what you say is most important."

Deborah pushed her head hard into the bed. "I can't even sort them out–– the words."

"Well then, just let it come to us."

"Are you that strong?"

"We are both that strong."

Deborah took a breath. "I am poisonous and I hate it. I am going to be destroyed in shame and degradation and I hate it. I hate myself and the deceivers. I hate my life and my death. For my truth the world gives only lies; I tried with Royson time after time, but I saw that all he wanted was to be right. He might as well have said, 'Come to your senses and stop the silliness'–– what they said for the years and years when I was disappointing them on the surface and lying to them with the inmost part of Yr and me and the enemy soldier. God curse me! God curse me!"

A soft scraping sound, a breathed rasp, came after, as she tried to cry, but the sound of it was so ridiculous and ugly that she soon stopped.

"Maybe when I leave," Furii said, "you can learn to cry. For now, let me say this: measure the hate you feel now, and the shame. That quantity is your capacity also to love and to feel joy and to have compassion. Also, I will see you tomorrow."

•

When her vision cleared, it was only enough to see and hear as if through a keyhole. She was aware that she was shouting and that attendants were in the room and that the walls of the room were covered with Yri words and sentences. Ranged around here were all the outpourings of hatred and anger and bitterness in a language whose metaphors used "broken" to mean "consenting" and "third rail" to mean "complying." All the words were extreme. *Uguru,* which was "dog-howling" and meant loneliness, was written in its superlative form in letters a foot high the length of one wall: U-G U R U S U. The words were written in pencil and in blood, and in some places scratched with a broken button.

There was a look of horror and surprise even on the faces of a hardened D-ward staff, and it was that look which brought the full fire from her. The world's fear and hatred were like the sun, common and pervading, daily and accepted–– a law of nature. Now its rays were focused in their look, waking fire. The words Deborah spoke were not loud, but they were full of hatred and they were Yri.

"Where is what you used to scratch this, Miss Blau?"

"Recreat," Deborah said. *"Recreat xangoran, temr e xangoranan. Naza e fango xangoranan. Inai dum. Ageai dum."*

("Remember me. Remember me in anger, fear me in bitter anger. Heat-craze my teeth in bitterest anger. The signal glance drops. The Game"–– Ageai meant the tearing of flesh with teeth as torture–– "is over.")

The Natural Depth in Man

Van Dusen has something much better than a theory to offer you. He has a wealth of unusual experience acutely perceived–– sixteen years as clinical psychiatrist at a state mental hospital, some of the earliest work with LSD, extraordinary personal interaction with the "voices" of patients, and mystical elevation of his own. There are surprises here.

–SB

The Natural Depth in Man
Wilson Van Dusen
1972; 216pp.
$1.50 postpaid
from:
Harper & Row
General Books
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

Dr. Paul Frey, a brilliant psychiatrist, carried out this demythologizing of mental illness in very practical ways. He was in charge of the units in a mental hospital that housed the most hopeless patients. His patients had often failed a number of gentle, thoughtful, professional psychotherapeutic approaches. He would greet a newcomer with, "Who did you scare to get yourself put in this nut house?" Actually, most people are hospitalized around incidents in which they frightened loved ones. Dr. Frey was giving the person back his feeling of power. The patient could and did scare someone. If he could understand how he scared others and correct that bit of behavior, he could leave the hospital. The usual approach of mouthing mental health euphemisms left the patient in a hopeless bind. "When you are feeling better we can take you to a mental conference and let you go" merely signals to the distraught patient the truth that he is caught in some incomprehensible maze and may have to wait for fate to work it out. "Who did you scare" strikes at the nitty-gritty of madness. It says madness is not some vague mysterious disease of the mind; it has to do with stupidities in human behavior that all are capable of.

•

The way out of madness is:

To do useful things to contribute to the environment.

To act with as much consideration and understanding of others as possible.

In both of these one can forget the painful self, at least for a while, and reestablish the self as a meaningful part of the world.

Corresponding to this the relationship to inner feelings and symbols will improve.

Delving into the psyche is helpful only insofar as it is translated into some kind of socially active result.

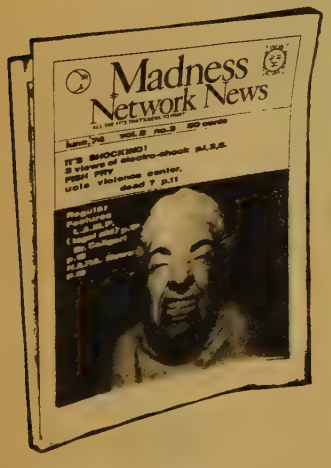
It is perhaps an odd paradox, but madness is uselessness. Sanity is usefulness. The internal is messed up only insofar as the external is messed up. Mysteriously, the reality of the internal is the external.

Madness Network News

NAPA

A newspaper and a newsletter representing the interests of mental patients. Full of life and fight. Fascinating to read, worthy to help. (See also **The Rights of Patients,** *pg.* **618***)*

–SB



Madness Network News
$4/yr
from:
Box 684
San Francisco, CA 94102

Lay down your crown its time to be a clown

–Avigdor

Dear Friend,

Here is your second and very last chance to get on NAPA's mailing list. Maybe you forgot to respond to our first mailing. Or maybe you didn't realize the seriousness of your decision. So take another look, think it over, and act!

If you fail to respond, we can only assume that you are catatonic or in some other way out of touch with reality, and under Section 6789 of the Welfare and Institutions Code we will have to report you to Assemblyman Lanterman to be assigned to your local outpatient therapy clinic for your one year term of mandatory therapy.

So, be quick, be paranoid, JOIN NAPA.

The Napa People

P.S. By the way, if you haven't responded because you don't have three dollars, respond anyway. Otherwise, we ask for three dollars to cover expenses for one year.

NAPA
Network Against Psychiatric Assault
629 Sutter Street
San Francisco, California 94102

Exploring Madness

Like one of those candy sampler boxes, all flavors of lunacy and accounts for it are arrayed here. A good portion of the world's truth is not sane: it wants acknowledging all the more.

–SB

Exploring Madness
(Experience, Theory, and Research)
James Fadiman and Donald Newman, Eds.
1973; 226pp.
$4.95 postpaid
from:
Brooks/Cole Division
Wadsworth Pub. Co.
540 Abrego St.
Monterey, CA 93940
or Whole Earth

To serve a mania is detestable and undignified, but to serve a god is decidedly more meaningful and more productive because it means an act of submission to a higher, spiritual being. The personification enables one to see the relative reality of the autonomous psychic fragmentary system, and thus makes its assimilation possible and depotentiates the forces of fate. Where the god is not acknowledged, ego-mania develops, and out of this mania comes illness.

–C.G. Jung

•

In the South Atlantic, Joshua Slocum had a severe gastro-intestinal upset just before a gale hit his boat; he had reefed his sails, but should have taken them down. Under the circumstances, he was unable to move from the cabin. At this point he saw a man take over the tiller. At first he thought it was a pirate, but the man reassured him and said that he was the pilot of the Pinta and that he would take his boat safely through the storm. Slocum asked him to take down sail, but the man said, no, they must catch the Pinta ahead. The next morning Slocum recovered, and found his boat had covered 93 miles on true course, sailing itself. (His boat was quite capable of such a performance; he arranged it that way for long trips without his hand at the helm.) In a dream that night the pilot appeared and said he would come whenever Slocum needed him. During the next three years the helmsman appeared to Slocum several times, during gales.

This type of hallucination-delusion seems to be characteristic of the strong egos who survive: a "savior" type of hallucination rather than a "destroyer" type. Their inner conviction of survival is projected thoroughly.

–John Lilly

Uniquity

Therapy toys, but why bother to be sick? Clobber each other harmlessly with Batacas. Get a human dartboard, jumbo nerf balls, encounter pillows, illusion gadgets. . .

–SB
[Suggested by Dave Patvia]

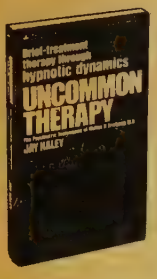
Catalog free from:
Uniquity
2035 Glyndon Ave.
P.O. Box 990
Venice, CA 90291

Bataca, Olympic Model: for continued heavy use. Covered with heavy duty cloth and stitching, medium poly foam body, padded oversized handguard. Length 22", dia 5½". Color–– red with white trim. $20.00/pr.

Uncommon Therapy

Milton Erickson is the greatest living hypno-therapist. He has invented dozens of wild and unusual ways to get people to cooperate in their own therapy. This book is a look at ways he worked without hypnosis. It is a wonderful pile of short stories of the ways in which he blew minds. Erickson can willingly be deceitful, nasty, vulgar, stupid, vicious, loving, explosive——whatever he felt was necessary for the patient. Haley's commentaries are useful. Don Juan would have liked Erickson, they both understand the way things are.

—Jim Fadiman



Uncommon Therapy
(The Psychiatric Techniques of Milton H. Erickson, M.D.)
Jay Haley
1974; 274pp.
$1.65 postpaid
from:
Ballantine Books, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

Erickson dealt with a competent industrialist who had lost a fortune and become depressed. He spent his time crying and repetitively moving his hands back and forth straight out from his chest. Erickson said to him, "You're a man who has had his ups and downs," and asked him to modify his movement by moving his hands up and down instead of back and forth. Then he took him to the occupational therapist and asked for cooperation. Pointing to the man's up-and-down movement, he said, "Put a piece of sandpaper in each of his hands and fasten a rough board upright between them. That way he can sand and polish the lumber." The man began to do something productive, and he stopped crying. He then began to work in wood and carved chess sets and sold them. He improved so much that he went home on a trial visit, and the first year after he was discharged he made ten thousand dollars in real estate.

•

By the end of the interview, the relationship was defined by Erickson as "You let me stick to the doctoring—— that's my business—— and you stick to getting no weller than you can —— that's your business." As Erickson puts it, "This negative formulation implied most effectively and acceptably a positive goal of actually getting well. Thus both positive and negative desires are united to achieve a common goal, wellness—— a goal he could feel was limited but which was not."

•

When I ask a husband for his point of view and the wife interrupts even when I ask her not to, then I usually find some action that will quiet her. For example, I will do it this way. I say to the wife, "I still want your husband's point of view, and you keep right on talking. I know it is because of your eagerness to help me understand. But do you happen to have a lipstick?" Of course she usually has a lipstick, and I ask her to take it out of her purse. Then I say, "Now, this will seem ridiculous to you, but suppose you hold that lipstick like this"—— I show her that I want her to hold it with the tip just gently touching her lips. "Now keep it right there, just touching. I'm going to ask your husband some questions, and I want you to notice how your lips want to move. I think you'll find it very interesting." A woman can get quite fascinated watching the quivering of her lips on that lipstick. By doing that, I've given her a legitimate use for her lips. She doesn't quite understand it, but she finds it amusing.

•

The old gentleman was a very proper, prudish man who was married to a proper and prudish wife. It was his overconcern with propriety that determined Erickson's strategy. He reports:

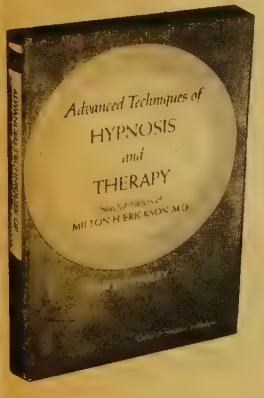
When the old gentleman asked if he could be helped for his fear of riding in an elevator, I told him I could probably scare the pants off him in *another* direction. He told me that nothing could be worse than his fear of an elevator. The elevators in that particular building were operated by young girls, and I made special arrangements with one in advance. She agreed to cooperate and thought it would be fun. I went with the gentleman to the elevator. He wasn't afraid of walking *into* an elevator, but when it started to move it became an unbearable experience. So I chose an unbusy time and I had him walk in and out of the elevator, back in and out. Then at a point when we walked in, I told the girl to close the door and said, "Let's go up." She went up one story and stopped in between floors. The gentleman started to yell, "What's wrong!" I said, "The elevator operator wants to *kiss* you." Shocked, the gentleman said, "But I'm a married man!" The girl said, "I don't mind that." She walked toward him, and he stepped back and said, "You start the elevator." So she started it. She went up to about the fourth floor and stopped it again between floors. She said, "I just have a craving for a kiss." He said, "You go about your business." He wanted that elevator moving, not standing still. She replied, "Well, let's go down and start all over again," and she began to take the elevator down. He said, "Not down, up!" since he didn't want to go through *that* all over again. She started up and then stopped the elevator between floors and said, "Do you promise you'll ride down in my elevator with me when you're through work?" He said, "I'll promise anything if you promise not to kiss me." He went up in the elevator, relieved and without fear—— of the elevator—— and could ride one from then on.

•

Advanced Techniques of Hypnosis & Therapy

Gradually the sciences of the human mind are achieving levels of abstraction and rigor appropriate to the discussion of mental processes. But Milton Erickson has been ahead of the field in this respect for forty years. This big book is a collection of his papers with some commentary by Jay Haley, and it is a most extraordinary collection. Erickson's method, whether of therapy or research, is the precise use of hypnosis. Under this investigation, the human mind turns out to be as precise in its evolutions and timing as a minuet.

—Gregory Bateson



Advanced Techniques of Hypnosis and Therapy
(Selected Papers of Milton H. Erickson, M.D.)
Jay Haley, ed.
1967; 557pp.
$19.75 postpaid
from:
Grune & Stratton, Inc.
Harcourt Brace & Jovanovich, Inc.
111 Fifth Avenue
New York, NY 10003
or Whole Earth

In working with new subjects, and always when planning to induce deep trances, a systematic effort is made to demonstrate to the subjects that they are in a fully protected situation. Measures to this end are relatively simple and seemingly absurdly inadequate. Nevertheless, personality reactions make them effective. For example, a psychology graduate volunteered as a demonstration subject for a seminar group. A light trance was induced with some difficulty, and her behavior suggested her need for assurance of protection. Under the pretext of teaching her automatic writing, she was instructed to write some interesting sentence and, having written it, not to show it until after automatic writing as a topic had been discussed. Hesitantly, she wrote briefly. She was told to turn the paper face down so that not even she could read it. Handed a new sheet of paper, she was asked to write automatically her conscious and unconscious answers to the question, "Are you willing to have me read what you wrote?" Both written replies were "yes," to which was automatically added, "anybody."

The suggestion was offered that there was no urgency about reading her sentence since it was her first effort at automatic writing, that it might be more interesting to fold it up and put it away in her purse and at some later time compare the script with further automatic writing she might do. Following this, a deep trance was easily induced.

•

For want of a better term, one of these special procedures may be termed the "confusion technique." It has been employed extensively for the induction of specific phenomena as well as deep trances. Usually, it is best employed with highly intelligent subjects interested in the hypnotic process, or with those consciously unwilling to go into a trance despite an unconscious willingness.

In essence, it is not more than a presentation of a whole series of individually differing, contradictory suggestions, apparently all at variance with each other, differently directed, and requiring a constant shift in orientation by the subject. . . As the subject tries, conditioned by his early cooperative response to the hypnotist's apparent misspeaking, to accommodate himself to the welter of confused, contradictory responses apparently sought, he finds himself at such a loss that he welcomes any positive suggestion that will permit a retreat from so unsatisfying and confusing a situation.

•

To Erickson, it is reasonable to talk to a patient about one thing while simultaneously communicating about quite different matters. For example, he will give an academic lecture while simultaneously hypnotizing a particular person in the audience, or he will talk about seemingly trivial matters with a patient while simultaneously carrying on through body movement and vocal intonation a conversation about the important concerns of the patient. Many of the body movements which a therapist uses "naturally" are used deliberately by Erickson, such as postural shifts, focusing his body in relation to the patient, or changing levels of his voice to bring about responsive body movement. He uses verbal communication as only one of the many possible ways of communicating, and with hypnotic subjects who did not speak English, he has demonstrated that trance can be induced entirely by non-verbal behavior.

Cream Rises
MIND

Steps to an Ecology of Mind *Double bind plus* 453
Uncommon Therapy *Tricks that cure* 741
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I Never Promised You a Rose Garden *Best loony-bin* 740
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Embodiments of Mind *Warren McCulloch probing* 316
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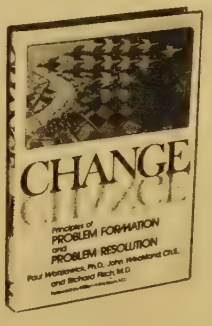
Self-Hypnotism *Do it yourself* 422
The Psychology of Consciousness *Left brain, right brain* 742

Change

Paradoxical problems require paradoxical solutions. With anecdotes, primal theory, and the ideas of Milton Erickson, Gregory Bateson, and Ross Ashby, this book makes some headway.

—SB
[Suggested by Gregory Bateson]



Change
(Principles of Problem Formation and Problem Resolution)
Paul Watzlawick, Ph. D., John Weakland, Ch.E., and Richard Fisch, M.D.
1974; 172pp.
$7.95 postpaid
from:
W.W. Norton & Co., Inc.
500 Fifth Ave.
New York, NY 10036
or Whole Earth

Daring as it is to investigate the unknown, even more so it is to question the known.

—Kaspar

When in 1334 the Duchess of Tyrol, Margareta Maultasch, encircled the castle of Hochosterwitz in the province of Carinthia, she knew only too well that the fortress, situated on an incredibly steep rock rising high above the valley floor, was impregnable to direct attack and would yield only to a long siege. In due course, the situation of the defenders became critical: they were down to their last ox and had only two bags of barley corn left. Margareta's situation was becoming equally pressing, albeit for different reasons: her troops were beginning to be unruly, there seemed to be no end to the siege in sight, and she had similarly urgent military business elsewhere. At this point the commandant of the castle decided on a desperate course of action which to his men must have seemed sheer folly: he had the last ox slaughtered, had its abdominal cavity filled with the remaining barley, and ordered the carcass thrown down the steep cliff onto a meadow in front of the enemy camp. Upon receiving this scornful message from above, the discouraged duchess abandoned the siege and moved on.

•

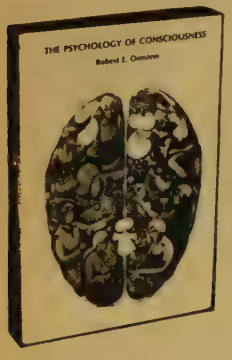
A person having a nightmare can do many things *in* his dream—— run, hide, fight, scream, jump off a cliff, etc.—— but no change from any one of these behaviors to another would ever terminate the nightmare. *We shall henceforth refer to this kind of change as first-order change.* The one way *out* of a dream involves a change from dreaming to waking. Waking, obviously, is no longer a part of the dream, but a change to an altogether different state. *This kind of change will from now on be referred to as second-order change.* (The equivalence of this distinction with Ashby's cybernetic definition of the two kinds of change, quoted earlier, is evident.) Second-order change is thus *change of change*—— the very phenomenon whose existence Aristotle denied so categorically.

The Psychology of Consciousness

Consciousness, says Ornstein, has two modes of operation, "one mode is verbal and rational, sequential in operation, orderly; the other is intuitive, tacit, diffuse in operation, less logical and neat, a mode we often devalue, culturally, personally, and even physiologically." The book brings together recent research on the two sides of the brain, ancient research from the esoteric psychologies, the rationale for meditation and a synthesis of it all.

Ornstein uses materials from the Sufi tradition to uplevel, entertain, and remind the reader that reading about consciousness is not the same as understanding and that understanding is not experience and finally experience is different than knowledge. "He who tastes knows."

—Jim Fadiman



The Psychology of Consciousness
Robert E. Ornstein
1972; 247pp.
$3.50 postpaid
from:
W.H. Freeman & Co.
660 Market St.
San Francisco, CA 94104
or Whole Earth

Never Know When It Might Come In Useful

Nasrudin sometimes took people for trips in his boat. One day a pedagogue hired him to ferry him across a very wide river. As soon as they were afloat, the scholar asked whether it was going to be rough.

"Don't ask me nothing about it," said Nasrudin.

"Have you never studied grammar?"

"No," said the Mulla.

"In that case, half your life has been wasted."

The Mulla said nothing.

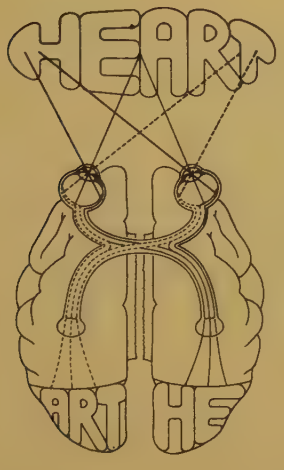
Soon a terrible storm blew up. The Mulla's crazy cockleshell was filling with water. He leaned over toward his companion. "Have you ever learned to swim?"

"No," said the pedant.

"In that case, schoolmaster, all your life is lost for we are sinking."

•

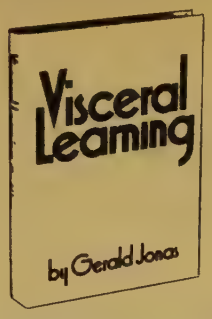
If the left hemisphere is specialized for analysis, the right hemisphere (again, remember, connected to the left side of the body) seems specialized for holistic mentation. Its language ability is quite limited. This hemisphere is primarily responsible for our orientation in space, artistic endeavor, crafts, body image, recognition of faces. It processes information more diffusely than does the left hemisphere, and its responsibilities demand a ready integration of many inputs at once. If the left hemisphere can be termed predominantly analytic and sequential in its operation, then the right hemisphere is more holistic and relational, and more simultaneous in its mode of operation.



A simplified diagram of visual input to the two hemispheres of the brain. Images in the left visual field are projected to the right hemisphere, images in the right visual field to the left hemisphere. This schematic drawing illustrates one experiment performed on split-brain patients: note that the corpus callosum is cut. The "HE" and "ART" projections are, of course, fanciful, not anatomically correct.

Visceral Learning

An account, expanded from **The New Yorker**, *of the work of Dr. Neal Miller. It's the solidest survey of the biofeedback realm that we've seen.*



—SB
[Suggested by Bruce Kelly]

Visceral Learning
(Toward a Science of Self-Control)
Gerald Jonas
1972; 154pp.
$6.95 postpaid
from
The Viking Press, Inc.
625 Madison Ave.
New York, NY 10022
or Whole Earth

Miller is one of a handful of experimental psychologists who have argued consistently (his colleagues might even say stubbornly) for what is known as a "global" view of man. He has always proceeded on the assumption that human behavior is all of a piece; that all responses to the environment, whether on a visceral or skeletal or cognitive level, are governed by the same basic laws—— the laws of instrumental learning—— and that the key to this unity is the continuous, multileveled integrative function performed by the human brain, which he once referred to, in an uncharacteristic burst of rhetoric, as the "greatest miracle in the universe."

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Improbable as it may sound, migraine sufferers have learned to turn off the pain in their head by warming up their hands "from the inside."

•

The Swami was supremely confident of his abilities—— and with good reason. The instruments showed that, without moving any of his skeletal muscles or changing his breathing, he could make his heart beat five times faster than normal—— a pace that would be fatal if sustained. The Swami could also produce a 10-degree difference in skin temperature between the thumb and the little finger of his right hand.

•

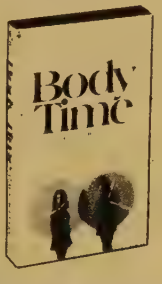
The Japanese researchers also tested the reaction of Zen meditators to mildly disturbing external stimulation—— a series of twenty clicks repeated at regular fifteen-second intervals. The results were surprising and provocative. After each click in the series, the alpha rhythm of the Zen meditato was blocked for a few seconds; then it resumed as if nothing had happened. This was in sharp contrast to the uninterrupted alpha of the Indian yogis, whose EEGs indicated that they were virtually impervious to external stimuli. The Zen meditators' reaction also differed sharply from that of a group of nonmeditating control subjects who were exposed to the clicks after they had been sitting long enough with their eyes closed to develop a well-organized alpha rhythm. In these control subjects, the first click completely blocked the alpha waves, but the second and third click had progressively less effect, and the startle reaction all but disappeared after the fourth click. Clearly, the subjects had come to expect the click so it no longer disturbed them. In psychological jargon, they had become habituated to the sound. Kasamatsu and Hirai emphasized the fact that the Zen meditators did *not* become habituated, no matter how many times the click was repeated. To explain why, the researchers turned to the subjects' own descriptions of the meditative experience:

The Zen masters reported to us that they had more clearly perceived each stimulus than in their ordinary waking state. In [the meditative] state of mind, one cannot be affected by either external or internal stimulus, nevertheless he is able to respond to it. He perceives the object, responds to it, and yet is never disturbed by it. Each stimulus is accepted as stimulus itself and treated as such. One Zen master described such a state of mind as that of noticing every person one sees on the street but of not looking back with emotional curiosity

Body Time

Because time is a subtler dimension than space, we become more easily disoriented in it, lose our natural rhythm, and pay the consequences. Gay Luce restores, and not shallowly.

—SB



Body Time
Gay Gaer Luce
1971; 411pp.
$1.50 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

It is approximately twenty-four hours, a rhythm usually called circadian, from the Latin *circa* (around) *dies* (day)—— around a day.

•

If we were abandoned with some food and entertainment in a salt mine, we would settle down to a circadian cycle of sleep and rest—— although we might oscillate at first. The circadian cycle seems to be an important organizing principle in our physiology. People may be unaware that their body temperature, blood pressure, respiration, pulse, blood sugar, hemoglobin levels, and amino acid levels change—— rising and falling in circadian cycles. So do our adrenal hormones, our urine volume, and almost every function from the rate of cell division to mood. Many rhythms go unnoticed. For instance, the skin temperature, particularly of the hands and feet, changes in a circadian rhythm. During sleep temperature is usually higher on the left side, while during the day it is usually higher on the right.

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Like the plant that flowers if given a little light at the right time, here may be a combination lock to human activity, moods, illnesses, creativity, and mental brightness. It will permit us to schedule teaching, therapy, performances, travel, medication, and many of the arts of raising children in a way that does not fight with inner timing. By understanding what we might call clockwork, we will find ourselves at a new threshold of mastery, a new consciousness of what kind of complex beasts we are, and how intimately our being pulses with that of the world around us.

BIOFEEDBACK GEAR

by George von Hilsheimer

Having published my first paper on biofeedback in 1966 I have been deeply involved in living through future shock as the damned hardware for this kind of fun and games goes through one generation after another.

The very first thing we had came from some unremembered maniac and was all potted in epoxy so no one could steal the circuits. It looked like dinosaur barf and worked about as well. Then B. Payne up in Mass brought out one in a plastic box, then a neater one in an aluminum box and things were looking up. Many gremlins remained.

Then came Aquarius Electronics and the several nasty rip offs from those nice people. If your thing is simple alpha wave feedback, and basically tripping that way with yourself and friends there is no better buy than the Aquarius instrument.

Aquarius Electronics
P.O. Box 627
Mendocino, CA 95460

If you want HI-FI alpha machinery then there is but one place to go:

Autogenic Systems Inc.
3804 Piedmont Ave.
Oakland, CA 94611
(415) 655-7017

These lovely things range from a relatively simple, but very accurate and reliable alpha feedback trainer at $225 to a marvelous dual range analyser, the Autogen 120, which does everything but send out for coffee. Oh, it is so lovely made and so accurate and durable. You can feedback any

kind of wave you can get a brain to perform and you can get high selectivity. Incredible cheap at $895.

A company that makes sturdy and reliable goodies, including an alpha analyzer, not quite up to Autogenic's but one you might want if you are into feeding back other goodies such as temperature, muscle potential and so on is:

Bio-Feedback Technology Inc.
10402-F Trask Ave.
Garden Grove, CA 92643

We have used every one of their machines in our neurophysiology lab and unless you work with hardcore uncooperative delinquents you ain't going to use the equipment as hard as we do. I can't tell you about their repair service because we have not had that kind of downtime on the machines. And that is not remarkable, its damn near miraculous.

I am a very ready buyer of biofeedback equipment, shop extensively at the conventions and these are the only three companies I am now prepared to recommend. I have one psychologist friend who specializes in curing psychosomatic complaints who has almost married his Autogenic System! Truly good. Both companies have imaginative people, helpful people, and pretty efficient people.

Cream Rises
SPIRIT

A Treasury of Traditional Wisdom
The collected works 456

I and Thou
The big intersubjectivity 456

The King and the Corpse
Best myth collection 427

Mysticism *The Christian mystics* 431

Tao Teh King *Succinct holy book* 12

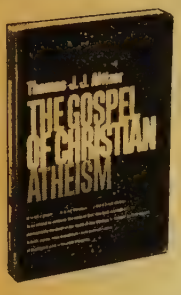
Castaneda *Best native American shamanism* 430,744

Zen Mind, Beginners Mind
Best intro to practice 429

The Gospel of Christian Atheism

It's dangerous to look Christianity in the eye, dangerous not to. This book looks. And annihilates transcendence.

—SB



The Gospel of Christian Atheism
Thomas J.J. Altizer
1954; 157pp.
$3.00 postpaid
from:
The Westminster Press
Witherspoon Building
Philadelphia, PA 19107
or Whole Earth

The primary sources of this book are the writings of Blake, Hegel, and Nietzsche.

•

The radical Christian refuses to speak of God's existence—Hegel appropriately speaks in his Logic of the soulless word "is"—because he knows that God has negated and transcended himself in the Incarnation, and thereby he has fully and finally ceased to exist in his original or primordial form. To know that God *is* Jesus, is to know that God himself has become flesh: no longer does God exist as transcendent Spirit or sovereign Lord, now God *is* love.

•

From the point of view of radical Christianity, the original heresy was the identification of the Church as the body of Christ. When the Church is known as the body of Christ, and the Church is further conceived as a distinct and particular institution or organism existing within but nevertheless apart from the world, then the body of Christ must inevitably be distinguished from and even opposed to the body of humanity.

•

By wagering that God is dead, we bet that the awesome and alien power of an infinitely distant and wholly other is finally created by our own guild and resentment, by our refusal of the life and energy about and within us. Of course, every man who negates and opposes life becomes bound to an alien power. But the Christian knows that Christ is the source of energy and life: hence the Christian must identify all No-saying as a refusal and resistance of Christ. When the Christian bets that God is dead, he is betting upon the real and actual presence of the fully incarnate Christ.

Sensory Deprivation Tank Kit

John Lilly voyaged in sensory deprivation—total dark, silence, body-temperature water, floating—as early as 1954. His later work with dolphins, LSD, and biocomputer theory made him renowned. These days in L.A., he's back in the tank, researching anew.

In cahoots with Lilly, Samadhi is offering a kit for a wooden tank which includes all the essential hardware—filters, temperature control, air circulation, etc. The wood may be bought locally for about $75.

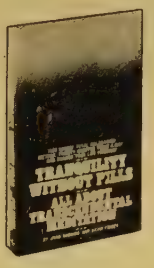
—SB
[Suggested by Stan Howard]

Samadhi Tank Kit
$900 FOB Mar Vista CA (60 lb.)
from:
Samadhi Tank Company
4322½ Inglewood Blvd
Mar Vista, CA 90066

Tranquility Without Pills

Transcendental Meditation ("TM") is undoubtedly the most readily accessible meditation regime for most Americans. Have a look at this promotional book; if it's tea you'd like to sip, contacting a TM group near you should be no problem. No way around it: meditation is good for you.

—SB



Tranquility Without Pills
(All About Transcendental Meditation)
Jhan Robbins & David Fisher
1972; 163pp.
$1.50 postpaid
from:
Bantam Books, Inc.
666 Fifth Ave.
New York, NY 10019
or Whole Earth

Learning how to meditate is not complicated. Twice daily, preferably in the morning and evening before eating, all you have to do is sit quietly and let your mind go wherever it wants. Normally, individuals are advised to meditate for two twenty-minute periods each day.

•

Since the only equipment needed to meditate successfully is your body, you can meditate almost anywhere. The only restrictions are that you should be somewhat comfortable and in a place where you'll be as uninterrupted as possible. If you're meditating at home, it is suggested that you take the phone off the hook and place animals behind a closed door. Many people meditate on the way to work, in the office, or in a plane. One vigorous young man claims he meditated successfully while floating on his back in a swimming pool.

•

The first place where you'll meditate is also where you're initiated and that could be in any of the 50 states or in 51 other nations. TM is particularly strong in England, West Germany, Norway, and Sweden. It is growing rapidly in many other countries. You can secure lists of centers by writing:

SIMS National Coordinating Center
1015 Gayley Avenue
Los Angeles, CA 90024

LEARNING

THE BEAUTIFUL PEOPLE PARTY

Truman Capote is the host of the Beautiful People party.

"Please call me Macho," he tells Tongue Fu with effeminate pride. "All my friends do. I mean you really have to be quite macho to go through life talking like this, dont'cha know?"

Tongue Fu mingles with the other guests.

He watches an intense argument, like a tennis game, over whether it is healthier to eat one meal a day or six.

He signs a petition being circulated by Sammy Davis Junior, calling on Ralph Nader to investigate the price of brown rice.

He offers a cocktail frankfurter on a yellow toothpick to Helen Gurley Brown, who says, "No, thanks, I'm a vegetarian this month."

"Oh," says Tongue Fu. "Do you eat fish?"

"No, I'm a real vegetarian."

"Well. Do you wear leather?"

"Only my underwear," she replies.

In the kitchen, Tongue Fu joins a group of Hollywood movie stars who are carefully cleaning between their capped teeth with a special roll of dental floss that has been soaked in a cocaine solution.

In the bedroom, he catches someone from Rent-a-Vandal cutting off the sleeves of all the coats and jackets on the bed.

In the bathroom, he listens to Art Linkletter sitting on the sink trying to sell a Plutonium Cluster Bomb insurance policy to Pat Boone, who is taking an underwater bubble bath with the aid of a snorkel.

Back in the living room, a corporation executive is boasting that he has paid less taxes to support the system than the radical with whom he is debating.

Over in the corner, there is a fervent discussion about the space program.

"I remember the first time a man walked on the moon," Rona Barrett is saying to an astronaut's groupie. "Now, tell me the truth, if you had your druthers, would you rather have seen that escapade on closed circuit television or what really happened at Chappaquiddick on the same night?"

"It doesn't matter either way," answers a practicing Satanist as his pocket is being picked by Billy Graham, "because when the earthquakes and the floods and the pestilence and the plagues of terminal gonorrhea spread around this planet—"

Tongue Fu has to interrupt: "Excuse me. You seem to be—gleeful—about these tragedies."

"Of course I am. Impending devastation is the only thing that gives me any optimism about the future. Would you care for a Quaalude?..."

Flashiebackie:

"There's always been decadence," the proprietor of a novelty items store is saying. "The Industrial Revolution was just a missing link between the Roman Empire and this portable electric artificial vagina."

Captain Mediafreak is filming his sales pitch to a customer, Tongue Fu.

"I wouldn't use it myself—I'm a happily married man—but we still live in a democracy. These products were originally intended to collect semen from bulls for the artificial insemination of cows, but they're perfectly safe for humans. However, their use is not recommended if you are a victim of premature ejaculation."

"How would I use this artificial vagina?" Tongue Fu asks.

"You plug it in your AC wall socket. This model has a temperature control mechanism which approximates natural vaginal warmth. You can increase the temperature all the way up to unbearable. You lubricate the instrument. We recommend our special lubricant which is formulated for optimum viscosity. You may choose to partially pressurize the instrument before penetration. It has a wide range of adjustability ranging from a diameter of two inches to entirely closed. This dial here regulates the tiny waves of stimulation which set up a pulsation pattern that aids in ultimately triggering the ejaculatory nerves. Incidentally, we also have a model which plugs into the cigarette lighter of your favorite automobile. Sometimes you feel like a spot of pleasure while waiting on line for gasoline. Or even in traffic; on the way home from work is a popular time."

"How does the deluxe model differ?" Tongue Fu asks.

"The deluxe artificial vagina has rubber folds which, upon inflation, roughly simulate the labia majora and minora as these tissues are when swollen in sexual passion. It also features a three-speed bulbocavernosus muscle which contracts rhythmically. Moreover, it is covered by a flesh-colored fabric with soft skin-like texture—Caucasian, Negroid or Asian. You would probably prefer the latter. Incidentally, the deluxe model has a spinchter attachment—do you happen to suffer from flaccid penis?—which is optional...."

Under the influence of cocaine and Quaalude, Tongue Fu leaves the Beautiful People party and goes home to the abandoned newsstand and his artificial vagina.

"You are still a virgin," he says to it, "but not after tonight."

But first he takes it out to dinner and a movie.

Carrying the artificial vagina in its unmarked storage container, he gets on a bus going to Greenwich Village, where he walks along West 8th Street. He shares an Orange Julius openly with the artificial vagina; doesn't care who sees them.

On the sidewalk again, he is so zonked out that he bumps into a passerby.

"Excuse me," says Tongue Fu, "but do you know when Safe-Driving Day is?"

He continues down the block, stopping at a movie theater where *Billy Jackoff* is playing.

"Two, please," he says to the ticket seller.

In the middle of the film he gets sick and goes to the Men's Room. While retching, he notices that someone has written among the graffiti on the wall of his stall:

ROCKY EATS AFTERBIRTH!

Tongue Fu takes the pen which is attached by a chain to the toilet-tissue dispenser, and writes underneath:

Placenta is good for you.

"That will give Rocky food for thought," he says to the artificial vagina, and he takes a bus back home.

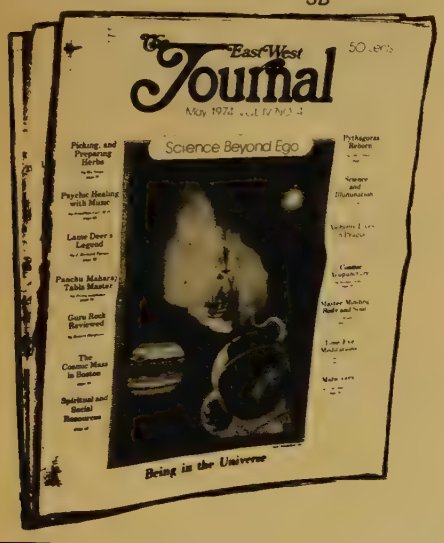
In his sleeping bag that night, Tongue Fu makes sure that his artificial vagina reaches several climaxes. He passes out before reaching one himself. Later a burning sensation around his penis wakes him up, but he pulls out the plug of his artificial vagina and goes back to sleep, mumbling, "Rosebud, you belong in the Ladies' Room...."

[Continued, page 755]

East-West Journal

An enthusiastic newsprint magazine of youthful spirituality. It covers the news sufficiently. I regret only its uncritical fondness—— leaving young seekers to discover the bad news amid religious enthusiasms by themselves.

—SB



The East-West Journal
Robert Hargrove, Ed.

$5.00 /12 issues, USA

$7.00 /12 issues, outside of USA

from:
New World News Service
31 Farnsworth St.
Boston, MA 02210

Last year, during the First International Conference on Psychotronics I met Robert Pavalita—— a most enigmatic man who just might be one of the first inventors of the New Age. He didn't speak English and I didn't speak Czech, but with the help of a translator we had a long conversation, after which he demonstrated to the people at the conference one of his generators. His daughter touched her hand to her head in a rhythmic way and then touched her hand to the generator. Within a few minutes the generator started to move. This is very difficult to explain in any conventional way, and I know one physicist who couldn't get to sleep all night trying to figure out how this happened.

—Stanley Krippner

•

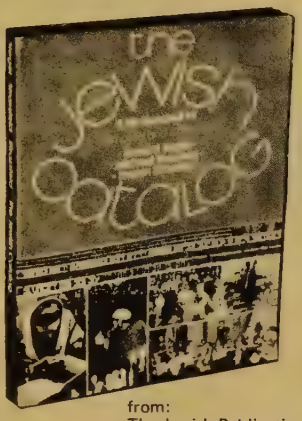
The New Polytheism, by James Miller (Harper and Row, 1974), 86 pages, $4.95.

This book suggests that the Greek gods and goddesses are coming to life again after the death of (monotheistic) God, as proclaimed by Nietzche.

The Jewish Catalog

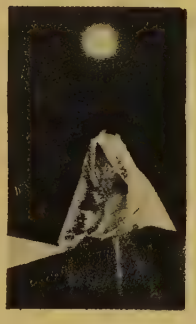
There are two, at times, very different traditions in Jewish thought and history. One tradition (the "rabbinical" tradition) has always been concerned with interpreting the Torah (the Old Testament plus attendant scriptures) in terms of the present historical moment. The other tradition, the Caballistic tradition, has been concerned with more ultimate religious truths that pertain to all human life—— regardless of historic period. **The Jewish Catalog** *is solidly in the rabbinical tradition. There are large bibliographies on Soviet Judaism, Israel and Zionism, and* modern *recipes for cooking East European Jewish Food. There is hardly mention of the new more self-conscious Judaism that is primarily concerned with the Semitic (pre-Arab) origins of Judaism. For instance, the heretic jews like Spinoza, Franz Kafka, and Carlos Saures, leading Jewish mystics, can't be found. Soviet writers like Isaac Babel or the great Jewish anthropologists like Raphael Patai and Claude Levi-Strauss are pointedly absent. But, if you are interested in contemporary historical Judaism in the Israeli-American tradition, this is a useful document.*

—PW



The Jewish Catalog
(A Do It Yourself Kit)
Richard Siegel, Michael Strassfeld, and Sharon Strassfeld, Eds.
1973; 319pp.

$5.00 postpaid



from:
The Jewish Publication Society of America
1528 Walnut St.
Philadelphia, PA 19102
or Whole Earth

1. "If you're planting a tree and you hear Mashiah has come, first finish planting and then run to the city gates to tell him Shalom" (Yochanan Ben Zakkai).
THEREFORE: Plant a tree somewhere as a small tikkun olam—— fixing up the world—— wherever the olam most needs it. Plant a tree in Vietnam in a defoliated former forest. *Go there to plant it* if possible (even if difficult); if not, send money to:

Heschel Memorial Forest Fund
Trees for Vietnam
211 Florida Ave. N.W
Washington, D.C. 20036

Plant a tree in Appalachia where the strip mines have poisoned the forests. *Go there to plant it; start a kibbutz there and grow more trees.* Plant a tree in Brooklyn where the asphalt has buried the forest. *Go back there to plant it* and live with some of the old Jews who still live there. If policemen come to save the asphalt, keep planting. Offer everybody a turn with the shovel.

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Blessing the New Moon: Birkhat ha-Levanah

1. It is a custom to bless the new moon. This is in remembrance of the way the new moon was publicly announced. In ancient times, any two witnesses would see the new moon and report it to the Sanhedrin—— the ancient supreme court of the Jews—— which would then proclaim the new month. Today, however, the whole procedure is done by calculation.
2. The Blessing of the New Moon should be done, however, between the third and fourteenth days of the new month, at which time the moon begins to diminish. The blessing is delayed until the third day because one should be able to see a significant portion of the new moon's light before blessing it.
3. The Blessing of the New Moon is usually done after Havdalah on Saturday night (see Candles and Candle-making). It is recommended that it be recited at that time because one is still in a festive mood and well dressed. However, it can be said any night during this period, even by oneself (i.e., without a minyan, quorum). The ceremony is found in the Siddur after the Shabbat Maariv—— the Evening Service that ends the Shabbat.

The Matter of Zen

A lucid, terse, warm-hearted invitation to sit, and keep sitting. Until? There isn't any "until."

—SB

The Matter of Zen
Paul Wienpahl
1964; 162pp.

$2.45 postpaid

from:
New York Univ. Press
Washington Square
New York, NY 10003
or Whole Earth

A person can learn more about Zen in a half hour of meditating than he can by reading a dozen books. It also follows, however, that, if a person is practicing meditation, words in the form of lectures, stories, or even books might help him with his understanding of Zen by helping him to improve his meditation practice. Because this is so, the literature of Zen is large and Zen teachers are by no means mute. . . . A person studies Zen Buddhism by meditation (sitting). He may perform other activities, like receiving instruction from a *roshi* or Zen teacher and practicing a certain moral code. However, these other things are all adjuncts to meditation. They are devices for improving it. They are in a sense parts of meditation. Nevertheless, the practice is meditation and the *goal* is meditation.

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The American was being shown about by the abbot of the temple. The visitor noticed that the abbot was bowing to the various statues of the Bodhisattvas in the different buildings as they entered. Finally, in some annoyance he said to the abbot: "I thought that you were a Zen Buddhist and free of all this bowing and scraping. Hell, *I'm* freer than you. I can spit on these statues."

"Okay," replied the abbot in his limited English, "You spits, I bows."

READINGS IN SUFISM

by Charles I. Campbell

Sufi writings have been widely misunderstood in the West. In any tradition, the mystics have often been misunderstood and even persecuted by the orthodox, and so with the Sufis of Islam. Their writings therefore have often been indirect, "coded" as some like to say. Moreover, the esoteric knowledge of the Sufi cannot really be expressed discursively, but can only be hinted at, alluded to, described by metaphor and symbol. This is indicated by the following Persian couplet:

O you who are unaware of burning and being burned
Know that the coming of love is not something learned.

Earthly love, wine, the cup-bearer, the moth extinguishing itself by its attraction for the flame of the candle are all used in Sufi writings to express the inexpressible. Those who already know, recognize in them the spiritual experience of their author and may find they give coherent form to their own experience. Sufi writings are also designed to arouse a certain recognition in those who are beginning to awaken, to stir a kind of nostalgia, and in this way are a means of setting out to find the Way.

The following list includes some of the best-known and most comprehensible material on Sufism and Islam. Here an explanation and a caution are necessary. Because there is no set form of Sufi practice it should not be supposed that the Way is indefinite. The Sufis say there are as many ways to God as there are human hearts. Only a Master who knows the hearts can give the key to open them and show the Way. This key, which may differ according to the lock, is called the Remembrance of God (*Dhikr* or *Zikr* in Arabic), often, but unsatisfactorily, translated as "invocation" or "commemoration." This practice is widely known and indeed something like it appears in many mystical ways, such as the Prayer of Jesus in the Orthodox Church or the mantras of the Far East. Masters of all Ways agree, however, that it is useless and even psychically dangerous to undertake such practices unless they are given under the direction of a master. Writings about the Sufi Way, therefore, even though they occasionally describe such practices in some detail, should be regarded as preliminary and descriptive and by no means taken as guides for do-it-yourself spiritual practices.

The following list of books can serve as a good introduction to Sufism. (Readers with no prior acquaintance with the subject might get a feel for the "flavor" of Sufi mysticism by beginning with Rumi and Attar, or with the modern works by Lings and Dallas.)

Arberry, A.J. **Sufism.**

Perhaps the best elementary overview of Islamic mysticism by an eminent scholar in the field. An excellent introduction.

Arberry, A.J. **The Discourses of Rumi.**

A collection of stories from the works of the great Persian poet, similar to tales of the Hasidim and to Zen stories.

Attar, **The Conference of the Birds.** (Nott edition)

A free translation, inspiring in English and profoundly moving in its effect. Through folk-tales, allegories, and lyrical descriptions, Attar has written a parable of the soul's quest for God.

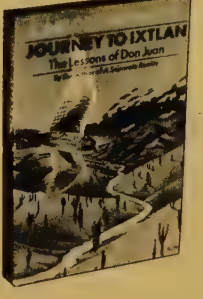
Burckhardt, Titus, **An Introduction to Sufi Doctrine.**

A short but dense work summarizing the intellectual foundations of Sufi mysticism, as expounded from the traditional point of view. Strongly influenced by Ibn al-Arabi. Valuable but not always easy to understand.

Journey to Ixtlan

The travels of Carlos Castaneda with his Yaqui sorcery teacher grow wilder still in this third volume (two before, Pg. **432**, *and more coming). It is simply the most original writing I know—— form and content. Some of it probably is fiction, but there's no fiction better.*

—SB



Journey to Ixtlan
(The Lessons of Don Juan)
Carlos Castaneda
1972; 315pp.

$2.95 postpaid

from:
Simon and Schuster
One W. 39th St.
New York, NY 10018
Attn: Order Dept.
or Whole Earth

"The art of a hunter is to become inaccessible," he said. "In the case of that blond girl it would've meant that you had to become a hunter and meet her sparingly. Not the way you did. You stayed with her day after day, until the only feeling that remained was boredom. True?"

I did not answer. I felt I did not have to. He was right.

"To be inaccessible means that you touch the world around you sparingly. You don't eat five quail; you eat one. You don't damage the plants just to make a barbecue pit. You don't expose yourself to the power of the wind unless it is

Everyone acts according to his understanding, and God alone knows who is rightly guided. S. XVII, v. 85, **Qur'an**, *written in* mirror-style *calligraphy.*

Dallas, Ian, **The Book of Strangers.**

This recent novel, written in the style of Borges or Hesse's **Journey to the East**, has been widely acclaimed for its presentation of the Sufi way of life in a fictional-allegorical framework.

Hujwirri, **Kashf al-Mahjub** (The Revelation of the Veiled) trans. R.A. Nicholson.

A classic of early Sufi literature. Very rich, but it is important to have some prior familiarity with Sufi doctrine.

Lings, Martin, **A Sufi Saint of the Twentieth Century.**

A beautiful portrait of a contemporary Shaikh (Spiritual Master) and a sympathetic exposition of his teaching. Highly recommended.

Nasr, Hosein, **Ideals and Realities of Islam.**

An introduction to the religion of Islam, this book reveals Sufism as essentially Islamic mysticism. Written from within Sufism by one of the leading scholars of Islam.

Nasr, Hosein, **Sufi Essays.**

A recent collection of essays exploring aspects of Sufism in its history and in its encounter with the modern world.

Nicholson, R.A., **Rumi: Poet and Mystic.**

A selection of short lyric poems, taken chiefly from Nicholson's own translation of Rumi's masterpiece, the **Mathnawi**. Recommended as an introduction to the greatest of the Persian mystical poets, Jalal ad-Din Rumi.

Rice, Cyprian (O.P.), **The Persian Sufis.**

An insightful introduction to Sufi doctrine by a Catholic writer which enjoys the imprimateur while acknowledging the guidance of a Pir of the Ni'matullahi Order.

Schuon, F. **Understanding Islam.**

Perhaps the finest exposition of the perennial and spiritual truth of Islam available; by a European Muslim from within the Sufi tradition. Profound but intellectually difficult; extremely worthwhile.

Shah, Idries, **The Sufis.**

Only one of Shah's many works but this book is the longest and the most original. Unfortunately, the "originality" also extends to the author's treatment of traditional Sufi teachings, which are developed in a speculative manner. Yet it is engagingly written, and, perhaps for this reason, has enjoyed wide popularity with those who are unfamiliar with Sufism.

Trimingham, J. **The Sufi Orders in Islam.**

An outstanding work of scholarship which treats the social and institutional framework of Sufism through its history.

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mandatory. You don't use and squeeze people until they have shriveled to nothing, especially the people you love." . . . "A hunter knows he will lure game into his traps over and over again, so he doesn't worry. To worry is to become accessible, unwittingly accessible. And once you worry you cling to anything out of desperation; and once you cling you are bound to get exhausted or to exhaust whoever or whatever you are clinging to."

•

The beetle emerged from a deep hole and stopped a few inches away from my face. It seemed to look at me and for a moment I felt that it became aware of my presence, perhaps as I was aware of the presence of my death. I experienced a shiver. The beetle and I were not that different after all. Death, like a shadow, was stalking both of us from behind the boulder. I had an extraordinary moment of elation. The beetle and I were on a par. Neither of us was better than the other. Our death made us equal.

My elation and joy were so overwhelming that I began to weep. Don Juan was right. He had always been right. I was living in a most mysterious world and, like everyone else, I was a most mysterious being, and yet I was no more important than a beetle. I wiped my eyes and as I rubbed them with the back of my hand I saw a man, or something which had the shape of a man. It was to my right about fifty yards away. I sat up straight and strained to see. The sun was almost on the horizon and its yellowish glow prevented me from getting a clear view. I heard a peculiar roar at that moment.

•

Finally it asked me what I was doing there and I said I had come there to "stop the world." The coyote said, "Que bueno!" and then I realized that it was a bilingual coyote.

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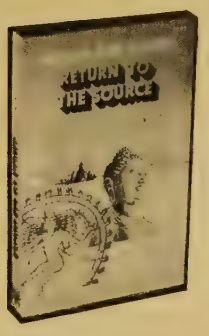
Return to the Source

A European devotee of Ghandi travels in India and writes notes of unusual penetration.

—SB
[Suggested by Bill Barich]



Return to the Source
Lanza Del Vasto
1943; 319pp.
$2.95 postpaid
from:
Simon and Schuster
630 Fifth Ave.
New York, NY 10020
or Whole Earth

Ceylon, December 1936

Here I am then, just off the ship, all alone, white of skin, self-conscious and bewildered, pestered by people trying to sell me things, by others promising me all kinds of pleasure or imploring me for alms, by volunteers eager to take me to the temple of Buddha or to the house where the nice ladies are.

•

One of the least appreciated, but no doubt one of the most precious, benefits of the method of non-violence is slowness.

Ghandi is careful not to speak of it to his followers.

•

My very love of absolute truth has taught me the beauty of compromise.

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Ecstasy: A Way of Knowing

A sampling of ecstatic states, especially of spontaneous ones. A good modern companion work to Evelyn Underhill's **Mysticism** *(Pg. 431).*

—SB
[Suggested by Irving Fisk]

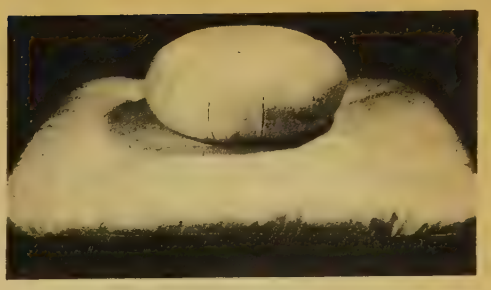
Ecstasy
(A way of Knowing)
Andrew M. Greeley
1974; 150pp.
$2.45 postpaid
from:
Prentice-Hall, Inc.
Box 500
Englewood Cliffs, NJ 07632
Box 18501
Salt Lake City, UT 84118
or Whole Earth

It is late at night. A man has driven many miles to a house on the shore of a lake. He parks his car, walks down the steps to a pier jutting out into the water. On this moonless night the man looks up toward the great black umbrella of stars over his head and a feeling of unspeakable peace comes over him. In the next instant of awareness it is morning; he has no idea what happened to all the hours in between.

A young woman has just made love with her husband. They have snatched an interlude together in the middle of the afternoon. It was the best sex they ever had, and she lies exhausted in his arms. Suddenly, a new and very different kind of pleasure takes possession of her. She smiles first and then laughs; her entire body takes on a peculiarly delightful glow. This new pleasure makes intercourse seem mild in comparison. The whole of the universe has somehow flooded her being.

A troubled young man has been listening to Beethoven's Ninth Symphony on a phonograph in his apartment. He turns off the music and begins to work on a term paper, but he makes little progress. The doubts, the fears, the thoughts of self-destruction that have harassed him before return. Then, in counterpoint, he hears the hymn of the Ode to Joy, and something, perhaps someone, takes possession of the room and of him. The doubts, the fears, the anxieties are dispelled forever; the young man *knows* there is nothing to worry about.

A mother bends over her baby's crib. The child is peacefully asleep, and she notices as though for the first time the shape of his tiny ear. It is the greatest work of art she has ever seen. Peace and joy surge through her, and a pale, misty blue light seems to absorb both her and her child for a time that seems both an instant and eternity.



Meditation Cushions

There are now three sources of minimal meditation furniture. You might as well deal with whoever's closest. Basic zafu and zabuton—— pillow and mat—— cost about $30.

—SB

Alaya Stitchery
Zen Center
300 Page St.
San Francisco, CA 94102

Samadhi
P.O. Box 203
Red Hook, NY 12571

Sharon Springs Zen Ctr.
Box 515
Sharon Springs, NY 13459

Pathways Through to Space

The Philosophy of Consciousness Without an Object

Franklin Merrell-Wolff's two books, written over the last 40 years and finally published last year, culminate the author's lifetime of introspective study and offer a profound service to Western students of ultimate realities. While the account of his psycho-spiritual unfolding, found in **Pathways Through to Space**, *and the more systematic exposition of his views in* **Consciousness Without An Object**, *do not actually set forth a way, method or practice for others to follow, they are the honest and generous expression of one who from all indications has truly experienced these ultimates of life—— and can directly describe them to a Western intellectual in his own language.*

—Doug Knott

The Philosophy of Consciousness Without an Object
(Reflections on the Nature of Transcendental Consciousness)
Franklin Merrell-Wolff
1973; 265pp
$8.50 postpaid

Pathways Through to Space
(A Personal Record of Transformation in Consciousness)
Franklin Merrell-Wolff
1973; 288pp
$7.50 postpaid

both from:
The Julian Press, Inc.
150 Fifth Ave.
New York, NY 10011
or Whole Earth

Samsara (conditioned existence): . . . consciousness of the field of objects. . . is preeminently consciousness in the field of tensions. . . the state of tensions is a state of ever-becoming. . . ceaseless action. . . so the state of consciousness of objects is a state of ever-renewing promises that pass into death at the moment of fulfillment.

Nirvana (Liberation) . . . When an individual has at last learned the trick of dissociating his "I" or subject from the whole universe of objects, he has, seemingly, retreated into a bare point of consciousness. But the moment he succeeds in doing this, the point is metamorphosed into a kind of space in which the Self and the content of consciousness are blended in one inseparable whole. I have called this the Spatial Void. . . the Nirvanic consciousness is not granular but flowing. . . consciousness of equilibrium is Nirvana.

The Void (the ultimate reality, not the spatial void above): But for consciousness-without-an-object, there is neither tension nor Equilibrium. . . neither Agony (samsara) or bliss (Nirvana). . . *like* space, it is the universal support that remains ever the same no matter what the nature of the supported might be . . . out of the Great Void, which is consciousness-without-an-object, the Universe is creatively projected.

Beginning Buddhism

by Rick Fields

Buddhism as a tool, maybe the sharpest and kindest tool held by us sentient beings, a tool for dismantling, cutting away and through, unmasking, demystifying. A tool for tearing down and transmuting the crazy checkerboard of duality, of Yes-No, Good-Bad, In-Out.

A tool, like an alarm-clock, for waking up.

Buddha, in Sanskrit, means Awake. Maybe we could call Buddhism Waking-Up-ism, or how-to-wake. Actually I could call it whatever I want, and miss it, utterly, entirely miss it. It is not something you can call.

"When Shakyamuni (Buddha) saw the morning star and was enlightened, he said, 'I was enlightened instantaneously with the universe.' "

What, my father, my mother, and many other people, want to know, does this have to do with us; two thousand five hundred years later—— we have the same problems. Suffering, birth, death, old age, sickness, sorrow. No matter how fast and intricately our machines move, we are still human. The use of Buddhism doesn't seem to be how to escape, how to become God-ized out of our humaness. It is more like something Geshe Wangyal, an old Lama with a face like beaten gold, who lives out in suburban New Jersey, told me: "Face it. Don't run. Turn around and face it." Obvious enough, in one sense. But in things "spiritual" it seems we are always looking for the way out, the melt, the union, the higher. . .

Like the man who discovered gravity, Shakyamuni Buddha got to work under a tree. What he discovered was as real as gravity. In fact, he touched his hand to the earth as witness. As solid earthy fact. What he found, after years of study with the most efficient ascetics, yogis and philosophers of his time, was that he had to work by himself, on his own mind. His own mind was the working basis. So he sat, folded his legs, folded his hands, and sat some more. As Chogyam Trungpa, Rinpoche said, meditation is manual labor.

Two thousand five hundred years ago Buddhism began in India and then migrated to China, Southeast Asia, Korea, Japan, Tibet, Sikkim, Bhutan, Mongolia. Within each country schools developed, each with their special taste and flavor. Today, almost all the schools are represented in North America. It is a unique situation. After centuries of separate developing in the hothouses of various cultures all the schools seem destined to try to put down roots in rocky, concrete soil of America.

What is emerging is a Western Buddhism, which because of the difficulty of the soil it is growing in will be that much stronger and vigorous. But it doesn't seem to me that the direction ought to be ecumenical, in that timehonored american tradition of making everything into one big cosmic stew. Rather, we need each school, undergoing the changes it must to survive in this new home.

If Buddhism is a tool meditation is the cutting edge, double-edged. It is not in its moral teaching that Buddhism has something special, but in the method of realization, of meditation. Buddhist meditation, in its most basic and common form, does not depend on either an external object or higher power. It is not mental gymnastics. Sitting and paying attention to what is there, to the mind—— if mind is there. Often the breath, one's own breath, serves as a kind of a path, sword, or reminder, something to come back to. This is the central power of Buddhism. Without practicing sitting all our spiritual talk is like the squawking of hungry crows.

Regularity of sitting matters. One little trick I've used is to try and sit everyday, even if only for five minutes, even if only for a few seconds. It almost always turns out longer, of course, but it is a neat way around the mind's idea that "there isn't enough time now."

The tool of sitting is best used with some periods of longer practice than would at first seem to make any sense at all. Many centers provide a chance to experience long hours, even days, of sitting. (Usually broken by walking-meditation, work, meals, tea.) In Zen Buddhism a week-long period is called a Sesshin (mind-gathering). It is a case of quantity changing quality, of hours passing like waves through successive layers of mind. At many centers it is not necessary to be a "member" to take part in these intensive meditation periods. Use them to provide the discipline, bells, atmosphere, telephoneless quiet so hard for many of us to find at home. In Zendos (Zen meditation halls) there is often some chanting, and a style, which to a newcomer, might seem rigid. All that order, however, frees you to look right into the chaos. Another good place to experience an all-day sitting is at one of the Dharmadatu centers (see below), inspired by Trungpa Rinpoche. The style is less formal than Zen, while following the same basic pattern of sitting and walking.

Rinzai Zen uses koan practices, in which the interview (sanzen) with the teacher plays an important part. Rinzai tends to demand a heavy commitment and training before you get to the koan. One exception to this is the Zen Master, Joshu Sasaki Roshi, who uses beginning koans especially adapted for Westerners. He seems to love to travel and holds Sesshins at various places around the country. (See Cimarron Zen Center, below.

Another form of intensive meditation practice is the retreat. The idea here is awesome. You just disappear. Either an apartment, a cabin, tent, cave or mountaintop are favorite spots. Cut off from entertainment and occupations you are back at the beginning. There is only one person now, and one mind, which has a way of filling all of space.

If you don't have extensive experience of meditation it's probably good to settle for no more than a week. Any longer and you need a support system, either someone to bring you supplies or a nearby, but not too near, place where you can pick them up. Tail of the Tiger, a meditation community in Vermont, provides you with cabin, stove, wood, and food for thirty-five dollars a week. They have a policy of being open to everybody; the only problem is that they are booked months in advance. If anyone knows of any other places with retreat facilities open to the public, write the Epilog. It could be a good way for a together commune to provide a needed service and make a little income.

It's good to remember in these meditation practices that body and mind become magnified. That's easy to forget when you've been on retreat for two weeks; so it might be a good idea to have someone who is relatively calm and clear stop by to see how you're doing, and remind you that you are seeing things through a high-powered microscope.

Which brings us to the teacher, guru, roshi, master. Many of us came to Buddhism in the first place because it taught a spiritual path which relied on no-one and nothing. Buddha's last words were, after all, "Everything that is conditioned passes. Be your own light." But now we find that the schools which have come West are brought here by human beings. Buddhism has always been passed along, transmitted, by one human being to another. Many of my friends find it hard to see this; as if it is somehow impure. The two poles of reaction are that it should come from 1) the gods, God, or higher forces; or, 2) be found purely by ourselves, with no outside help whatsoever. But for me the very humanness of Buddhism is that it depends on specific people who each have their own style. This is one of the things that gives Buddhism its salty quality. It's one thing to read all those books and to space out in your own meditation—— somehow it's when you run into another human being that you are shaken, grounded out of your subjective sky, and the whole process becomes more real.

It is not a matter of saying you've got to have a teacher; but of saying that teachers do exist; and can be used. That many people are put off by the idea of a teacher in a process so intimate as spiritual journey is one reason America could be considered a healthy soil for these teachings. Be as cynical, careful, wary as a fox. This said, it can also be noted that a true teacher is an extremely accurate tool for seeing yourself. A teacher acts as a mirror, but a special mirror, a 360 degree mirror, which might reflect your image back calmly, but which also might fling it back in your face. Rather than a towering demigod whose very touch blisses you out, a teacher is seen, first, as a rather stern hard-assed disciplinarian or even as a psychic martial arts instructor. A teacher could also be someone with whom you can just talk over or check out your meditation experience.

But one aspect of Buddhism that sticks is that it is an oral teaching, which is not the same as written, and somewhere along the line there must be someone doing the speaking. In Tibet if there is no living being to carry along the understanding of a school the texts go upon a shelf and gather dust.

Nearly all centers spring from the energy of a particular teacher, but many of them (though not all) may be used without having to say that this is the one. Meditation halls have been called furnaces to burn away delusions, as well as spacious meadows. They are there to be used. The real meditation hall is, of course, the one you carry with you as your own awareness.

Having been mad enough to write all this, I feel that I owe it to myself and anyone who has read this far to point out that the Dharma and the Teaching of it, is as vast as limitless space. Buddhism may be a tool, but it is a tool which can disappear in your hand, as if it had suddenly turned into the lion's roar of the whole universe.

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What We Have/What We Need

The literature on Buddhism has been building for a couple of thousand years. What is given here is a list of books and journals based on centers which are active in North America. The list is representative rather than complete. I have emphasized books by contemporary teachers.

I'd like this section of the **Epilog** to become the seed of an on-going Journal of American Buddhism. We would like to hear from people with a direct knowledge of different centers, teachers, and special events, such as Sesshins, intensive meditation periods, seminars. There is also a growing need for information on retreat facilities. Short reviews of any helpful books would also be welcome. News of who is translating what. Examples of fresh translations that make the teachings come alive.

We could also list where different "meditation aids" can be found. By "meditation aid" I mean any object which helps you in your practice. Cushions, zafus, good incense, bells, butter lamps, images, silkscreens. Many centers are trying to support their practice by crafts and other "cottage industries"; a directory of who is making what. (I've long been looking for an hour glass to time sittings.)

Also, what good recordings of Buddhist music and chanting are around. Films and tapes. We could also use information on the problems of studying and travelling to Japan, India, Southeast Asia. Whatever, in short, you feel should be part of an active anthology in which we all hold a share. The Epilog will pay $10 for published reviews.

The Listings are broken down into three basic divisions, which follow the three main Buddhist Traditions, *Theravadin* (sometimes called Hinayana), *Mahayana, Vajrayana* (sometimes called Tantrayana). The Theravadin School ("The School of the Elders") is the earliest and is based on the Pali Canon of Scriptures. It now survives chiefly in Burma, Ceylon, and Thailand. Mahayana is the Northern School, a later development based on the idea of Bodhisattva, who vows to postpone his own entry into "Nirvana" in order to help all sentient beings. Found in Japan, China, Korea, Vietnam. Vajrayana is the Tantric school of Tibetan Buddhism.

THERAVADIN CENTERS

Washington Vihara
5017-16th St., N.W.
Washington, D.C. 20011
(202) 723-0773
The Ven. D. Piyananda Maha Thera, President. The Vihara is open daily; there is a Sunday service. There are four meditation classes a week. Publication: **The Wheel,** translations of Pali texts, articles by Nyanaponika Thera, Soma Thera, Conze, many practical articles relating to a modern Buddhism. Single Numbers 25 cents, Double Numbers 50 cents; also publish **Bodhi Leaves,** a pamphlet series. The Vihara Book Service, same address as above, has a useful catalogue and carries over two hundred titles on Buddhism.

Stillpoint Institutes
604 South 15th St.
San Jose, CA 95112
The Ven. Anagarika Sujata, who has received full monastic ordination in Ceylon, is Director. Classes in Vipassana, "insight" meditation. The Society holds a one-month meditation retreat.
Book: **Beginning to See** by Anagarika Sujata

Vipassana Centre
c/o The Limes, Douglas Avenue,
Hyth, Kent, England
V.R. Dhiravamsa, the Director and Meditation Master of the Centre, visits this country quite often. I've heard him speak twice, and always wanted to hear more. But I've never been able to find out where he was speaking next. He has conducted retreats at various places. He was formerly known as Chao Khun Sobhana Dhammasudhi. His books are among the best on Vipassana meditation.
Books: **Beneficial Factors for Meditation,** an elementary guide to Vipassana Meditation, preferably for beginners by Chao Khun Sobhana Dhammasudhi, $1.50. **The Real Way to Awakening** by Chao Khun Sobhana Dhammasudhi. **A New Approach to Buddhism** by V.R. Dhiravamsa, $1.50. "When we talk of 'the way of awareness' we do not mean that awareness is one thing and the way is another, or that there is a technique for applying awareness to life. Awareness itself is the doing, the practice, the action—— there is no technique for being aware."

Order from the above address, or from: Dharmadatu Books, 331 W. 20th Street, New York, N.Y. 10011.

Other books:
The Heart of Buddhist Meditation by Nyapanika Thera, $3.00. A basic introduction to the "Way of Mindfulness." Includes a translation of the Maha-Sattipatthana-Sutta. From: Samuel Weiser, 734 Broadway, New York, N.Y. 10003.
The Satipatthana Vipassana Meditation by Mahasi Sayadaw, $1.75. "This manuscript arrived with a friend back from four years in a monastery in Thailand." A step by step guide, beautifully edited and designed.
Practical Insight Meditation by Mahasi Sayadaw, $2.25. An extension and advanced study.
Both the above from: Unity Press, PO Box 26350, San Francisco, Ca. 94126.

MAHAYANA CENTERS

Zen Center of San Francisco
300 Page Street
San Francisco, CA 94102

The San Francisco Zen Center was founded by Suzuki-roshi, a Soto Zen Master. The current teacher is Baker-roshi. The Zen Center also includes Tassajara Zen Mountain Center, and Green Gulch Farm. There is a guest student program, which makes it possible to live at the San Francisco Center for $4.25 a day. Write in advance.
Publication: **Wind Bell,** three times a year, subscription $3.00. Wind Bell contains news of all three centers, lectures by Baker-roshi and the late Suzuki-roshi, interviews, translations.
Book: **Zen Mind, Beginners Mind**, by Shunry Suzuki Roshi, published by Weatherhill, 149 Madison Ave., New York, NY 10016. This is the book on Zen meditation, and a living Zen practice in America. It consists of informal talks given by Suzuki-roshi. It not only tells you how to start sitting, but how to keep sitting. The meditation is that of Soto Zen, "shikan-taza," just sitting, and emphasizes working with the breath. "When you do something, you should burn yourself completely, like a good bonfire, leaving no trace of yourself."

Commentary, February 8, 1971

One student may say it will cover the whole state, and another may say it will cover the whole earth, but I would rather say, as Nanyo Echu said, "Any stone will be good enough." Even a small stone can be good enough for me. You know, which do you like-- the whole world or a small stone? I rather prefer a small stone which we can carry or move. The small stone is you yourself which covers everything. If you think the whole big universe is yourself, you will be lost. It does not make any sense. You need one small room for yourself. That is very true. When you find yourself really in the small room, as one of your rooms, then there is you yourself and the whole universe is there. The whole universe makes sense to you. Without your room, the whole universe does not make any sense.

–Suzuki-roshi

Zen Mission Society
Shasta Abbey
Rural Route 1, Box 578-A1
Mount Shasta, California 96067
(916) 926-4208

Jiyu Kennet-roshi is an English woman who has studied in Chinese Zen temples in Malaysia, and for a number of years in Japan, where she was the head of a temple, as well as head of Sojiji Foreign Guest Department, an organization that specialized in training foreigners in Zen.
Zen Mission Society concentrates on training for the Buddhist priesthood. However, they also have facilities for guests, retreats and sesshins.
Publication: **Journal of the Zen Mission Society.** As a "corresponding member", $12 per year, you receive twelve issues of the journal and correspond with Kennet-roshi regarding your practice.
Book: **Selling Water By the River,** A Manual of Zen Training, by Jiyu Kennett, Vintage Books, $2.45, contains translations of many Zen ceremonies, and the first translations of Keizan Zenji. From the introduction by Chisan Koho, "The people of Western Countries also, if Zen is ever to reach them properly, must color it for themselves just as the Japanese did. Thus will Zen be reborn in the West. Like the Buddhist at rebirth, the new Zen will be neither completely new, being the same stream of Truth, nor completely old, as it will have new forms, ways, customs and culture. . . this book (is) a manual suitable for Western people who are sincerely seeking true Zen but not trying to copy Eastern ways and manners."

Cimarron Zen Center
Rinzai-Ji, Inc.
2505 S. Cimarron St.
Los Angeles, CA 90018
(213) 732-2263

This is a Rinzai Zen center. Rinzai uses koan, question-and-answer, as a central part of practice. Joshu Sasaki Roshi is the teacher; he has adapted koan practice to American students. There are Sesshins, which can be attended by non-members. Joshu Roshi is in the LA area for alternating three month periods. The rest of the time he holds Dai-Sesshins in various parts of North America. These sesshins provide ample chances for "sanzen," interviews based on koans. Write to the Cimarron Zen Center. Affiliates are: Mt. Baldy (Cal.) Zen Center, Vancouver (B.C.) Zen Center, Redondo Beach (Cal.) Zen Center, and Jemez Bodhi Mandala (N.M.).
Publication: Newsletter, which includes talks by Sasaki Roshi.

Gold Mountain Monastery
Sino-American Buddhist Association
1731 15th Street
San Francisco, California 94103
(415) 621-5202

This is a Chinese Ch'an (Zen) center. The teacher is Master Hsuan Hua. Gold Mountain Monastery is open to everyone; practices include a wide range, from five-week long intensive meditation sessions to classes in Chinese and Sanskrit. These people get up very early in the morning.
Publication: **Vajra Bodhi Sea,** contains talks by Master Hsuan Hua, plus translations of Chinese texts, plus interviews and biographies of students.

Diamond Sangha
A Zen Buddhist Society
Maui Zendo
R.R. 1 Box 702
Haiku, Hawaii 96708
(808) 572-8163

Koko An Zendo
2119 Kaloa Way
Honolulu, Hawaii 96822
(808) 946-0666

Yamada Roshi visits from Japan. Robert Aitken is the Director. There is a real vitality to this group's practice, which has been especially sympathetic to "alternative culture" people. They are crowded, so write before showing up.
Publication: Diamond Sangha, especially valuable to people interested in Zen communities. Gary Snyder, and others not living in the community contribute to this valuable and enjoyable journal.

The Zen Center
7 Arnold Park
Rochester, New York 14607
(716) 473-9180

Roshi Philip Kapleau trained in Zen for thirteen years in Japan. His teacher, Yasutani Roshi, taught an "integral" Zen grounded in both Rinzai and Soto. Koan study is usual for more experienced students. It is necessary to attend one of the Introductory Workshops before you can apply for membership. Sesshins are open only to regular members. There are about 25 "affiliate groups" in different parts of the country who welcome new students.
Publication: **Zen Bow**, talks by Roshi Kapleau, Yasutani Roshi, other articles on Zen Practice. Voluntary subscription rate $3.00 a year.
Books: **Three Pillars of Zen**, Beacon Press, by Philip Kapleau, gives a very complete and clear picture of the type of meditation practiced here. It also includes Yasutani-roshi's Introductory Lectures in Za zen, which are pure gold, as well as interviews Yasutani Roshi held with students during Sesshin. They are also first person descriptions of what people have gone through during Sesshin, experiencing "kensho" or satori. **The Wheel of Death**, Harper & Row, also by Philip Kapleau. A collection of writings from Zen Buddhist and other sources on death-rebirth-dying.

Zen Studies Society, Inc.
223 East 67th St.
New York, NY 10021
(212) 628-9652

New York Zendo-Shobo Ji - Rinzai Zen Buddhist Temple. Eido Shimano Roshi founder and teacher. Practice by membership. Thursday evening meetings open to the public, and one can apply to become a regular member from this. Sesshins not open.

New York Zen Center
440 West End Avenue
New York, New York 10024
(212) 724-4172

Reverend Kando Nakajima is a Soto Zen teacher, who has also studied Theravadin Buddhism in Ceylon. "The purpose of the Center is to provide a place for Zen Meditation where anyone wishing to sit regularly, listen to a lecture from a Zen priest, or come to sesshin once a month, may attend." Sesshins are open to anyone who has previously practiced zazen.
Publication: **Zen Life,** three times a year.
A complete list of Zen groups has been compiled by Ronald W. Hadley, Box 83, Norwich, Vermont 05055, under the title **A List of Organizations For the Practice of Zen Buddhism In the United States**. The typescript is 102 pages long, and includes extensive information of each group. It has been xeroxed and costs $5.80 postpaid.

VAJRAYANA CENTERS

Lamaist Buddhist Monastery of America
140 East Third St.
Howell, New Jersey 07731

Geshe Wangyal, who has been teaching here since 1955, gives a lecture the first Sunday of each month. There are also three other Geshes teaching at the Monastery. The Monastery serves the interests of a local Kalmuck community, as well as teaching Westerners. There is also a Retreat House, for more intensive study with Geshe Wangyal, and a translation center, The Buddhist Studies Institute.
Book: **The Door of Liberation**, Essential teachings of the Tibetan Buddhist Tradition, collected and edited under the supervision of the Geshe Wangyal, published by Maurice Girodias Associates, 220 Park Ave., South, New York, NY 10003. Contains translations and commentaries from the Gelugpa School of Tibetan Buddhism, especially from Lama Tsong-kha-pa.

Ewam Choden Tibetan Buddhist Center
254 Cambridge Street
Kensington, California 94708
(415) 527-7363

Kunga Thartse Rinpoche (Sakyapa School) gives classes in meditation, Tibetan language and culture. There are daily meditations at the center.
Publication: **Ewan Choden Newsletter**

Tibetan Nyingmapa Meditation Center
2425 Hillside Avenue
Berkeley, California 94704

Tarthang Tulku Rinpoche, is a Lama of the Nyingmapa School, the oldest of the Tibetan Schools. Meditation classes, Tibetan language and culture. There is also a translation program.
Publication: **Crystal Mirror,** $3.50 an issue. More of a book than a magazine. Translations of Nyingmapa texts, articles by Tarthang Tulku, H.V. Guenther, and others. Issue no. 2 includes an extensive interview with Tarthang Tulku.
Books: **Calm And Clear** is a translation of an important text on meditation by MiPham, a 19th-century Nyingmapa teacher. **Legend of the Great Stupa** includes a translation of **The Life Story of the Lotus Born Guru,** PadmaSambhava, who brought Tantric Buddhism to Tibet from India in the Eighth Century. Available from: Dharma Press, address above.

Kagyu Kunkhyab Chuling
725 West 14th Avenue
Vancouver, British Columbia
Canada

Lama Tsewang Gyurmed lives and teaches regularly at the centre. Kalu Rinpoche is a Meditation Master of the Kargyu School. He lives in India, but travels to the West about once a year. Book: The center has published **The Foundations of Buddhist Meditation** by The Very Venerable Kalu Rinpoche, a text which is written in the traditional Tibetan style. It is a concise summary of key points to know and remember in Dharma practice and costs $1.75. They have also published a **Continuous Rain To Benefit Beings** by The Fifteenth Karmapa Kakhyab Dorje which costs $1.25.
Publication: a newsletter every two or three months-- $1.00 to get on mailing list.

Vajradhatu
1111 Pearl Street
Boulder, Colorado 80302

Vajradhatu is the name for the association of centers working under the guidance of Chogyam Trungpa Rinpoche. They range from a community in Barnet, Vermont, Tail of the Tiger, to smaller centers in cities. These Dharmadatu Centers, which are open to anyone, hold daily meditations, as well as an all-day (Sunday) meditation, which, like the Zen sesshin, combine sitting, walking meditation and work, but in a less formal style. There are also study groups and talks, which alternate with tapes of Trungpa Rinpoche.
Publications: **Garuda,** published annually by Vajradhatu and Shambhala. **Garuda III** is $1.95. It contains talks by Trungpa Rinpoche, as well as poems, calligraphy. It also carries material by Suzuki-roshi, H.V. Guenther, as well as people working with Trungpa. Lectures and seminars by Trungpa Rinpoche are available on tape (reel or cassette) from Vajradhatu.
Books: **Meditation in Action** is a good introduction to Trungpa Rinpoche's approach. **Cutting Through Spiritual Materialism**, also by Trungpa Rinpoche, is the most recent and most complete book. The idea of spiritual materialism, "looking for exits to turn off at because we can't bear to be where we are " is central. This is an overview of the full range of teachings, from the Four Noble Truths to Tantra. Available from Vajradhatu.

"It takes tremendous effort to work one's way through the difficulties of the path and actually get into the situations of life thoroughly and properly. So the whole point of the hard way seems to be that some individual effort must be made by the student to acknowledge himself, to go through the process of unmasking. One must be willing to stand alone, which is difficult."
From: Dharmadhatu Books, 331 W. 20th St., N.Y., N.Y. 10013 or Shambhala, 1409 Fifth St., Berkeley, Calif. 94710.

Buddhism: Its Essence and Development

A river of books, good books, pours across this desk. Every now and then, rarely, some of that water is wine. Dr. Conze's book is vintage. Have a taste.

—SB

Buddhism: Its Essence and Development
Edward Conze
1959; 124pp.
$1.95 postpaid

from:
Harper & Row
General Bks.
Keystone Industrial Park
Scranton, PA 18512
or Whole Earth

To a person who is thoroughly disillusioned with the contemporary world, and with himself, Buddhism may offer many points of attraction— in the transcending sublimity of the fairy land of its subtle thoughts, in the splendour of its works of art, in the magnificence of its hold over vast populations, and in the determined heroism and quiet refinement of those who are steeped into it. Although one may originally be attracted by its remoteness, one can appreciate the real value of Buddhism only when one judges it by the results it produces in one's own life from day to day.

•

The Buddha's last injunction to his disciples ran: *All conditioned things are impermanent. Work out your salvation with diligence.* In their long history, the Buddhists have never lost this practical bent. Innumerable misunderstandings would have been avoided if one had seen that the statements of Buddhist writers are not meant to be propositions about the nature of reality, but advice on how to act, statements about modes of behaviour, and the experiences connected with them. 'If you want to get there, then you must do this.' 'If you do this, you will experience this.'

•

If a philosopher here has proved that there is no ego, he is apt to leave it at that, and to behave very much as if there were one. His greed, hate and attachment remain practically untouched by his philosophical arguments. He is judged by the consistency of his views, not with his life, but with themselves, by his style, his erudition— in short, by purely intellectual standards. It just would not do to 'refute' a philosopher by pointing out that he is insufferably rude to his wife, envies his more fortunate colleagues, and gets flustered when contradicted. In Buddhism on the contrary, the entire stress lies on the mode of living, on the saintliness of life, on the removal of attachment to this world. A merely theoretical proposition, such as 'there is no ego' would be regarded as utterly sterile, and useless. Thought is no more than a tool and its justification lies in its products.

•

In addition to pragmatism and psychological emphasis, Buddhist thought is inclined to what we may call *Dialectics.* Dialectics is a form of logic, associated in Europe with such names as Zenon of Elea and Hegel. It stands for the belief that, if you think properly and deeply on anything, you arrive at contradictions, i.e. at statements which to some extent cancel each other out. Buddhist thinkers loved paradox and contradiction.

•

Buddhists assume, by the way, as a matter of course that life is not confined to this earth, that living beings dwell in many of the stars, and the later Buddhism of the Mahayana laid great stress on the Buddhas and Bodhisattvas who worked to release suffering beings in world systems other than our own.

•

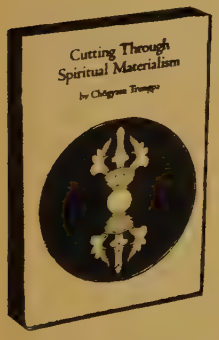
Cutting Through Spiritual Materialism

Gurus and religions are a dime a dozen. They supermarket comfort as a new bunch of rules and perceptions. In fact, the religions and gurus, once memorized, become huge burdens. Many of us try to avoid what's happening— internally, externally, wherever— by using Religion and Gurus as a comfortable crutch. This crutch is "spiritual materialism" and Trungpa will kick it out from your armpit. Thank goodness. Here's a spiritual companion— neither lofty nor pretentious— just startling, disarming and incessantly clear.

Trungpa (I've never met him) appears to be the most Whole Mind for the Whole Earth. From Tibet, a diamond clarity. From England, the tongue-in-cheek humor of Alice-In-Wonderland Logicians. From France, existentialist sports car precision. From the USA, a peculiar impatience with Holden Caulfield, double-bind mind. So loosen up, have a drink, and meet the fusion of Whole Earth philosophical gentleness.

—PW

[Suggested by Denny Blouin]



Cutting Through Spiritual Materialism
Chogyam Trungpa
1973; 250pp.
$3.95 postpaid

from:
Shambhala Pub., Inc.
Random House
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

We could say that compassion is the ultimate attitude of wealth: an anti-poverty attitude, a war on want. It contains all sorts of heroic, juicy, positive, visionary, expansive qualities. And it implies larger scale thinking, a freer and more expansive way of relating to yourself and the world. This is precisely why the second *yana* is called the "Mahayana," the "Great Vehicle." It is the attitude that one has been born fundamentally rich rather than that one must become rich. Without this kind of confidence meditation cannot be transferred into action at all.

Compassion automatically invites you to relate with people, because you no longer regard people as a drain on your energy. They recharge your energy, because in the process of relating with them you acknowledge your wealth, your richness.

•

In Buddhist literature there is a metaphor commonly used to describe this whole process, the creation and development of ego. It speaks of a monkey locked in an empty house, a house with five windows representing the five senses.

Q: What does the monkey perceive when he looks out of the five windows of the house?
A: Well, he perceives the east, west, south and north.
Q: How do they look to him?
A. A square world.
Q: What about outside the house?
A: Well, a square world, because he sees through windows.
Q: He doesn't see anything in the distance?
A: He could, but it is also a square picture, because it is like hanging a picture on the wall isn't it?
Q: What happens to the monkey when he takes a little LSD or peyote?
A: He has already taken it.

•

Somehow you have to be right in no-man's land in order to see things as they are. Seeing things requires a leap, and one can only take this so-called leap without leaping from anywhere. If you see from somewhere, you will be conscious of the distance and conscious of the seer as well. So you can only see things as they are in the midst of nowhere. Like one cannot taste one's own tongue. Think about it.

•

Again it is said in the teachings: "Better not to begin. Once you begin, better to finish it." So you had better not step onto the spiritual path unless you must. Once you have stepped foot on the path, you have really done it, you cannot step back. There is no way of escaping.

•

It is with our emotions that we create demons and gods: those things which we want out of our lives and world are the demons; those things which we would draw to us are the gods and goddesses. The rest is just scenery.

By being willing to accept the demons and gods and goddesses as they are, Milarepa transmuted them. They became dakinis, or the energies of life.

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The Perfection of Wisdom in Eight Thousand Lines & Its Verse Summary

This is Dr. Edward Conze's translation of the earliest poetry and prose versions of the voluminous **Perfect Wisdom** *literature. Dr. Conze presents it as "an instance of the Perennial Philosophy", ranking with the Torah, the Koran, and the Gospels as having "the greatest impact on the religious consciousness of mankind."*

The **8,000 Lines** *faces us with a description of Absolute Reality— the world viewed by one perfected in wisdom. It is a Buddhist response to the dilemma of religious literature: "How do you talk about what can't be talked about?" For those who, as Dr. Conze says, "wish to understand the mentality of the East" it is an extraordinary philosophical or literary example. For a Buddhist student, it is the mind of the Patriarchs, an encouragement to practice, to respond to the insight that Reality is inter-dependent, changing, and Empty.*

"No wisdom can we get hold of, no highest perfection;
No Bodhisattva, no thought of enlightenment either.
When told of this, if not bewildered and in no way anxious,
A Bodhisattva courses in the Well-Gone's wisdom."

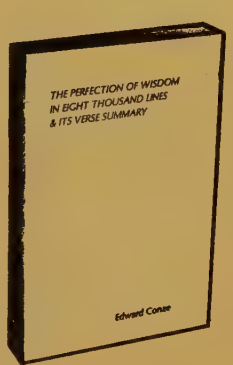
"Perfect wisdom is empty, it neither increases nor decreases. If the mind of a Bodhisattva works on the fact that all dharmas are through their own-being isolated and empty. . . then he becomes one who is not lacking in mental activities associated with perfect wisdom. . . ."

The Bodhisattva is proposed as one who tries continually to help people despite the Emptiness which extends to all beings and enlightenment itself.

So that all the world might be helped, I will place all beings into Suchness.

In the early '40s, on the inspiration of D.T. Suzuki and a lineage of European scholars, Dr. Conze retreated to a private English wood for several years of study and meditation. Regarding it as his mission and the love of his life he then made accessible to the West the texts and understanding of the Prajnaparamita in a long series of translations, editions, anthologies, commentary, and more popular works on Buddhist tradition. Richard Baker-roshi has said that "without his work it would be practically impossible to study Zen or Mahayana Buddhism in the West." The importance of **The Sutra in 8,000 Lines** *in Buddhism parallels the significance of the present publication in Dr. Conze's scholarly life. And this Four Seasons edition is beautifully designed, a volume you work with for many years.*

—Richard Levine



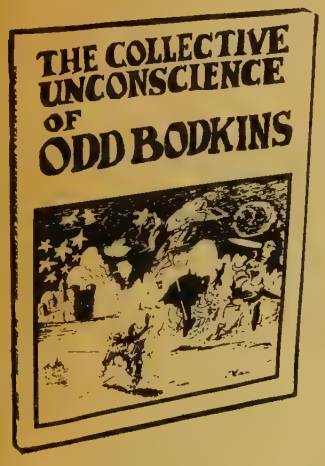
The Perfection of Wisdom in Eight Thousand Lines & Its Verse Summary
Edward Conze
1973; 325pp.
$5.00 postpaid

Published by
Four Seasons
from: "your local bookstore"
or Whole Earth

The Collective Unconscience of Odd Bodkins

O'Neill's best, I think (there's more on Pg. 689 and 239). The syndicated-newspaper short, sharp shots that eventually got him banned from public view. Guaranteed to disturb. I mean, delight.

—SB



The Collective Unconscience of Odd Bodkins
Dan O'Neill
1973
$4.20 postpaid
from:
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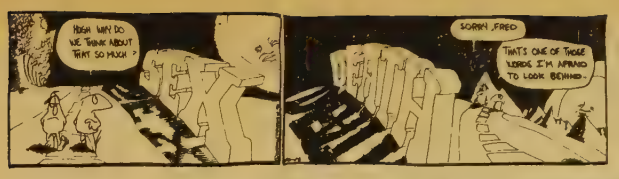
330 Ellis St.
San Francisco, Ca 94102
or Whole Earth



Memories, Dreams, Reflections

I think there is no more remarkable autobiography in this century. Dream power and intellectual power collided in Jung's life, merged finally, and carried him pilot-and-passenger on a psychic Gulf Stream, far and strange. He took 20th Century science with him.

The recent editions of this book carry in full the Seven Sermons to the Dead *that Bateson reviews below. It was absent from earlier editions, from* The Collected Works, *and was published privately and anonymously when it was written (1916)—— the rarest feather from a rare bird.*

—SB

Memories, Dreams, Reflections
C.G. Jung
1961; 430pp.
$2.95 postpaid
from:
Vintage Books
Random House, Inc.
457 Hahn Rd.
Westminster, MD 21157
or Whole Earth

While Freud was going on this way, I had a curious sensation. It was as if my diaphragm were made of iron and were becoming red-hot—— a glowing vault. And at that moment there was such a loud report in the bookcase, which stood right next to us, that we both started up in alarm, fearing the thing was going to topple over on us. I said to Freud: "There, that is an example of a so-called catalytic exteriorization phenomenon."

"Oh come," he exclaimed. "That is sheer bosh."

"It is not," I replied. "You are mistaken, Herr Professor. And to prove my point I now predict that in a moment there will be another such loud report!" Sure enough, no sooner had I said the words than the same detonation went off in the bookcase.To this day, I do not know what gave me this certainty. But I knew beyond all doubt that the report would come again. Freud only stared aghast at me. I do not know what was in his mind or what his look meant. In any case, this incident aroused his mistrust of me, and I had the feeling that I had done something against him. I never afterward discussed the incident with him.

•

At the beginning of 1944 I broke my foot, and this misadventure was followed by a heart attack. In a state of unconsciousness I experienced deliriums and visions which must have begun when I hung on the edge of death and was being given oxygen and camphor injections. The images were so tremendous that I myself concluded that I was close to death. My nurse afterward told me, "It was as if you were surrounded by a bright glow." That was a phenomenon she had sometimes observed in the dying, she added. I had reached the outermost limit, and do not know whether I was in a dream or an ecstasy. At any rate, extremely strange things began to happen to me.

It seemed to me that I was high up in space. Far below I saw the globe of the earth, bathed in a gloriously blue light. I saw the deep blue sea and the continents. Far below my feet lay Ceylon, and in the distance ahead of me the subcontinent of India. My field of vision did not include the whole earth, but its global shape was plainly distinguishable and its outlines shone with a silvery gleam through that wonderful blue light. In many places the globe seemed colored or spotted dark green like oxydized silver. Far away to the left lay a broad expanse—— the reddish-yellow desert of Arabia; it was as though the silver of the earth had there assumed a reddish-gold hue. Then came the Red Sea, and far, far back—— as if in the upper left of a map—— I could just make out a bit of the Mediterranean. My gaze was directed chiefly toward that. Everything else appeared indistinct. I could also see the snow-covered Himalayas, but in that direction it was foggy or cloudy. I did not look to the right at all. I knew that I was on the point of departing from the earth.

Later I discovered how high in space one would have to be to have so extensive a view—— approximately a thousand miles! The sight of the earth from this height was the most glorious thing I had ever seen.

•

People have the idea that the dead know far more than we, for Christian doctrine teaches that in the hereafter we shall "see face to face." Apparently, however, the souls of the dead "know" only what they knew at the moment of death, and nothing beyond that. Hence their endeavor to penetrate into life in order to share in the knowledge of men. I frequently have a feeling that they are standing directly behind us, waiting to hear what answer we will give to them, and what answer to destiny. It seems to me as if they were dependent on the living for receiving answers to their questions, that is, on those who have survived them and exist in a world of change: as if omniscience or, as I might put it, omniconsciousness were not at their disposal but could flow only into the psyche of the living, into a soul bound to a body. The mind of the living appears, therefore, to hold an advantage over that of the dead in at least one point: in the capacity for attaining clear and decisive cognitions. As I see it, the three-dimensional world in time and space is like a system of co-ordinates; what is here separated into ordinates and abscissae may appear "there," in space-timelessness, as a primordial image with many aspects, perhaps as a diffuse cloud of cognition surrounding an archetype. Yet a system of co-ordinates is necessary if any distinction of discrete contents is to be possible. Any such operation seems to us unthinkable in a state of diffuse omniscience, or, as the case may be, of subjectless consciousness, with no spatio-temporal demarcations. Cognition, like generation, presupposes an opposition, a here and there, an above and below, a before and after.

C. G. Jung's SEPTEM SERMONES AD MORTUOS

by Gregory Bateson

This tiny book is for me the greatest achievement of Jung's life—— the turning point in a long battle. He clearly recognises in **Memories, Dreams, Reflections** that the days (in 1916) in which it was written were the beginning of all his later insights.

At that time he was coming out of a long period of slow recovery from the influence of Freud and from the break with Freud. It was the moment for a new (or return to a very old) natural history of Man-God-Cosmos.

The book is difficult to read. It is (of course) a sort of poetry, and therefore almost impossible to be reviewed and analysed in prose. And Jung's views clearly changed as he wrote, even in the three or four days of the writing. He was in a state of *transition*.

Man is a gateway, through which from the outer world of gods, daemons, and souls ye [the Dead] shall pass into the inner world; out of the greater into the smaller world. Small and transitory is man. . . At immeasurable distance standeth one single Star in the zenith.

The book then both *is* a progress from macrocosm to microcosm and is a description of the landscape at various stages of that progress.

It is not clear (does not matter) who is the novice and who the initiator in this strange catechism. Not only Jung but also the Dead are in transition. They came "back from Jerusalem, where they found not what they sought."

From his state of transition, Jung sees three concepts to which he gives the Gnostic names: Pleroma, Creatura and Abraxas. There is also—— man.

Abraxas is approximately, Shiva, the ultimate Creator-Destroyer. The most terrible and most beautiful of all the gods that man contains within his microcosmic self and that in turn is contained in the macrocosm. Within Abraxas, the more familiar figures (Helios, the Sun; and the Devil, darkness) are subsumed. But it is Abraxas that gets the poetry.

It is splendid as a lion in the instant he striketh down his victim.

It is beautiful as a day in Spring.

. . . . . .

To look upon it, is blindness.

To know it, is sickness.

To worship it, is death.

To fear it, is wisdom.

To resist it not, is redemption.

All this is within *creatura*, the realm where differences, distinctions, and ideas hold sway. The ground out of which creatura looms as figure (in the language of Gestalt theory) is *pleroma*—— the totally unconceived and unstructured realm about which nothing can be said or thought because to say anything is to create distinction. Call it "void" or "fulness," it is still older and deeper than that first distinction by which creature comes into recognition and therefore being.

The book is exasperating, profound and beautiful.

•

Whole Earth Epilog

Credits

Editor Stewart Brand (SB)
Managing Editor Andrew Fluegelman (AF)
Office Diana Barich
Copy Editor Pamela Cokeley
Research traffic Andrea Sharp

Art Director Alwyn T. Perrin
Typesetting Evelyn Eldridge, Joe Bacon
Camera Andrew Main
Paste-Up Susan King Roth, Stephen Leaper, Katherine Borsody
Logo & cover paste-up David Wills

Stewart Brand, Diana Barich, Pam Cokeley, Andrea Sharp, Al Perrin, Peter Warshall, Richard Nilsen, Rosie Menninger, J. Baldwin, Kathleen Whitacre, Diana Sloat, Doris Herrick, Evelyn Eldridge, Don Burns.

Money

WHOLE EARTH EPILOG

Here's what happens to your $4, approximately:

$1.60	Bookseller
.24	Jobber
.41	Penguin
.74	Printing
.15	Brand
.86	POINT (covers production, The CoEvolution Quarterly, future Catalogs, and some grants)
$4.00	

(For the hardcover edition—— $9.25—— percentages are equivalent. The print cost per book is $2.55.)

Epilog Production Costs

Expenses, September 1, 1973 through Aug. 31, 1974

	Epilog	The CQ Spring & Summer Summer '74
Wages ($2.75-$7.00/hr)	$36,940	$ 9,100
Office Supplies	6,775	1,720
Rent & Utilities	760	—
Phone	1,999	—
Travel & Auto	225	—
Public Relations	2,219	—
Legal Fees	3,720	—
Independent Contractors (& Reviewers)	15,319	2,700
Production Supplies	4,787	1,400
Printing	1,584	10,425
Research	3,245	400
Miscellaneous	1,218	—
Tongue Fu	15,000	
	$93,791	$25,745 (Income potentially, $20,000)
TOTAL	$104,536	

By comparison, production costs on THE LAST WHOLE EARTH CATALOG were approximately $30,000.

THE LAST WHOLE EARTH CATALOG

Copies sold July 1971 - March 1974

1971	July-Sept	328,990
	Oct-Dec	344,978
1972	Jan-Mar	128,879
	Apr-June	72,896
	July-Sept	115,595
	Oct-Dec	62,633
1973	Jan-Mar	45,959
	Apr-June	19,386
	July-Sept	34,125
	Oct-Dec	370,590
1974	Jan-Mar	25,403
		1,196,513 copies

Gross receipts $3,163,066. Where it went:

Printing	$920,359
Random House	816,546
Gurney Norman	103,449
Bookworks (Don Gerrard)	118,967
POINT	1,203,745

Between June 1971 and September 1973, POINT made grants totaling $663,541. Details in Summer '74 CoEvolution Quarterly. *Grants during the winter of '73-'74 comprise roughly another $400,000. To cover print costs for the EPILOG, POINT had to borrow money. POINT's address: Box 99554, San Francisco, CA 94109.*

Land Use editors Peter Warshall (PW), Richard Nilsen (RN), Rosemary Menninger (RM)
Shelter editor Lloyd Kahn (LK)
Soft Technology editor J. Baldwin (JB)
Craft editor Diana Sloat (DS)
Community editor Diana Barich (DB)
Nomadics editor Alwyn T. Perrin (AP)
Learning co-editor Doris Herrick (DH)
Index Reddy Dively North
Proofreading J. Baldwin, Kathleen Whitacre, Laura Besserman, Andrea Sharp

Tongue Fu Paul Krassner; illustrations: Steamboat
Articles Howard T. Odum, Doris Herrick, Robert Chrisman & Robert Allen, Orville Schell, Tom Macy, Robin Rycraft, TVTV, Don Buchla, Rick Fields

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Penguin liaison Don Passer, Don Burns, Walter Keller
Color separations and page negatives Gregory & Falk, San Francisco
Printing George Banta Company, Menasha, Wisconsin

POINT board and officers Michael Phillips (President), Lawrence Klein (Secretary), Huey Johnson, Jerry Mander, Stewart Brand, Nathan Hare, Richard Baker, Richard Raymond (ret.), Bill English (ret.) Lois Britton (treasurer), Richard Austin (Business administrator), Elijah

Andrew Main, Susan Roth, Steve Leaper, Katherine Borsody, David Wills, Reddy North, Paul Krassner, Bob Chrisman, Bob Allen (co-authors, "Black Interest"), Orville Schell ("China"), Huey Johnson, Nathan Hare, Richard Austin.

Epilog Printing

1st Printing September 1974 · 350,000 softcover
$ .74 each $259,000; 20,000 hardcover
$2.55 each $51,000

MAIL ORDER EPILOGS AND CATALOGS

Whole Earth Epilog
Softcover $4 postpaid
Hardcover (library binding) $9.25 postpaid

The Updated Last Whole Earth Catalog
Softcover $5 postpaid
Hardcover (library binding) $10.75 postpaid

If your local stores don't have them you can get them mail-order from The Whole Earth Truck Store, 558 Santa Cruz, Menlo Park, CA 94025.

(Wholesalers and bookstores should order the EPILOG from Penguin Books Inc, 7110 Ambassador Rd., Baltimore, MD 21207 and the CATALOG from Random House, Inc., 457 Hahn Rd., Westminster, MD 21157.)

Good question

Just receiv'd copy of **Epilog**: *[teäser]. I just have one question: Are you guys the symptom or the cure? Put it another way; there was nothing wrong with dinosaurs, was there?*

Paul Ceruzzi
Lawrence, KS

The CoEVOLUTION Quarterly

Subscribing to The CoEvolution Quarterly

Here's the absolutely most efficient way for us to send you the next four issues of **The CQ** at a 25% saving off the newsstand price:

1. Write your name, address and zip code on a 3" x 5" index card (or other paper).
2. Mail the card, and a check for $6, payable to "The CoEvolution Quarterly" to:

The CQ
558 Santa Cruz
Menlo Park, CA 94025

(We also welcome your comments, suggestions, reviews, reports and well-founded rumors. Please write them in a separate letter, and send it to us at Box 428, Sausalito, CA 94965.)

History

(Continued from Pg. 441)

So, in June 1971, we had the Demise Party celebrating the self-termination of The Whole Earth Catalog, and all in all it was a rout. 1500 people showed up. The Exploratorium staff had their museum weirding around us at full steam. A band called The Golden Toad made every kind of music from bluegrass to bellydance. A non-stop non-score volleyball game competed for loudest activity with balloons full of inhalable laughing gas. And then at midnight Scott Beach announced from the stage that these here two hundred $100 dollar bills, yes, $20,000, were now the property of the party-goers, just as soon as they could decide what to do with them.

"Flush them down the toilet!" "No, don't!" "Give it to the Indians!" "Bangladesh!" "Our commune needs a pump or we'll all get hepatitis!" And so on. The debate lasted till 9 a.m. the next morning, when a dozen remaining hardcore turned the remaining $15,000 ($5,000 had been distributed to the crowd at one wild point) over to Fred Moore, dishwasher. Fred later gathered people for other group decidings over what to do with the money that worked out damn well. Most of the story, **Rolling Stone**'s *account, is in* **The Seven Laws of Money**. *(Pg.* **616***).*

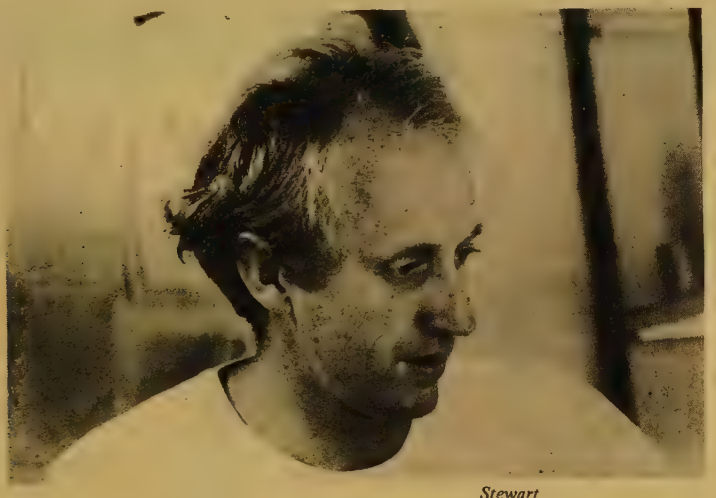
My reasons for perpetrating? Pure curiosity. Some of the surprises were: 1) The money kept trying to come back—— innumerable suggestions involved Portola Institute as the recipient; 2) Handling of more than a pocketfull of power was new to most, upsetting, educational; 3) Ideas were mostly lousy—— unoriginal, guilt-ridden; 4) People who focussed on the process of deciding had a much better time than those who focussed on the money; 5) "Free money" is crazy.

It was not a bad overture for the founding of POINT, the foundation that took over from Portola the dispensing of Whole Earth's soon sizable income. Dick Raymond and I appointed a board consisting of ourselves, Huey Johnson from the Nature Conservancy, Mike Phillips from Glide Foundation, Jerry Mander (radical ad-man), and Bill English from Xerox. The seventh director was always a guest, called "Elijah," different each time we met.

The first thing we did was give up on my "Mountain Fantasy" notion of a bifurcated high hard community—— too pushily experimental. Instead we focussed on being a needle in the gaseous foundation world. We ruled that none of us could be with POINT more than three years. We dispensed (Jerry Mander's brilliant stroke) with group decision about money—— each director had $55,000 a year to give out at his unchallenged discretion. We funded quickly and without fuss, usually preferring to do without proposals and such. We held board meetings on salmon boats at sea, in tipis, in Glide's sex room, at the Black Panther school in Oakland. And our grants were maybe no worse than other people's—— they're listed in entirety in the Summer '74 **Co-Evolution Quarterly** *if you're interested.*

Huey Johnson and Jerry Mander, who fought constantly, were the best funders. Dick Raymond and I were terrible. Now there's mostly a new set of directors, whose qualities we shall see. The main lesson I learned was: it's not enough to give money to someone who's very good. They must also be in the grip of an overwhelming idea which is very good; otherwise a hideous paralysis will take them over and, in addition, freeze your friendship.

My own travels after the Demise were mostly unpublic, narrow, hard. Wife Lois and I trailered around and bought a piece of land in Canada. By that winter back in the Bay Area our marriage was coming unstuck—— mostly my doing I reckon. Colleges were hiring me for occasional talks at $500 a throw (time is shorter and price higher nowadays). In the spring of '72 I was up to my neck in a POINT-funded misbegotten effort to liven up the UN Conference on The Human Environment in Stockholm by sending over sundry poets, Indians, radical scientists, and the Hog Farm travelling commune. The Swedish lefties figured the CIA sent us. The only mitigation to the debacle, in my view, was Joan McIntyre's success in promoting the UN approval of a 10-year moratorium on all whaling.



Stewart

That same Spring the National Book Award in "Contemporary Affairs" was given to the **Whole Earth Catalog** *over the dead body of judge Gary Wills, who resigned in protest. I told the audience at Lincoln Center (speaking slowly, as neighboring recipient Donald Barthelme had kindly advised me), "If the award encourages still more self-initiated, amateur, use-based, non-New York publishing, good deal," and then wasted the $1000 check on Stockholm. Random House sweetly faked up a framable award for my wall.*

New York. . . Its other response was two invitations to make a Broadway musical comedy called "The Last Whole Earth Catalog"—— one from Edward Padula ("Bye Bye Birdie"), one from Stuart Ostrow ("1776")—— mixed emotions about the projects on all hands. Oh yeah; there was a highly enjoyable half hour on the Dick Cavett Show (he held his boffer aloft, remarked, "You can't get hurt with these, you say. What if you swallow it?" swatted me a sneaky blow, ran and gave the weapon to broadsword-trained Black actor Woody Strode, who declaimed something about "unhand-that-princess" while beating me up).

Other Whole Earth staffers were busier than I. Hal Hershey was becoming a prize-winning book designer with Shambhala in Berkeley. J.D. Smith notioned up a magazine called **Place** *and then departed for wildest Idaho while Dudley and Barbara DeZonia made it into a fine damn magazine (now defunct; worthy back issues available from Place, Walnut Grove, CA 95690.) Steamboat went back to Nebraska. Laura Besserman became the Southern California sales rep for Penguin Books. Francine Slate took on the accounting for the Briarpatch Auto Repair Cooperative. Gurney Norman spent his "Divine Right's Trip" earnings on a big piece of land which nearly crushed him, but came out okay and resumed work on his vast trilogy. Fred Richardson became a blaster and then a blacksmith. The Truck Store crew gradually rotated its ranks until now only Annie Hines is left from the old volleyball-in-back days.*

I returned in bad shape from Stockholm, hied immediately to Canada with Lois, and built a small house—— far the most rewarding effort I'd been involved in since starting the Catalog. And unbuilt a marriage. On return to California we both made our way through the divorce trauma. Lois remarried well to Keith Britton, who is English and a professional dynamiter. I resumed an active bachelorhood in San Francisco. Paul Krassner sublet one of my closets for his hot nights in town, and we became referred to as "the hip Odd Couple"—— he wrote it up for **Place**.

And within the meanwhile, I was dealing with a sporadic case of the Greater Whim-whams—— a state of mind I've never seen better described than by Edward Conze.

> The discoveries which philosophers and psychologists have made in recent years about the central importance of anxiety at the very core of our being, have quite a Buddhist ring about them. According to the views elaborated by Scheler, Freud, Heidegger and Jaspers, there is in the core of our being a basic anxiety, a little empty hole from which all other forms of anxiety and unease draw their strength. In its pure form, this anxiety is experienced only by people with an introspective and philosophical turn of mind, and even then only rarely. If one has never felt it oneself, no amount of explanation will convince. If one has felt it, one will never forget, however much one may try. It may come upon you when you have been asleep, withdrawn from the world; you wake up in the middle of the night and feel a kind of astonishment at being there, which then gives way to a fear and horror at the mere fact of being there. It is then that you catch yourself by yourself, just for a moment against the background of a kind of nothingness all around you, and with a gnawing sense of your powerlessness, your utter helplessness in the face of this astonishing fact that you are there at all. Usually, we avoid this experience as much as we possibly can, because it is so shattering and painful. Usually, I am very careful not to have myself by myself, but The I plus all sorts of other experiences. People who are busy all the time, who must always think of something, who must always be doing something, are incessantly running away from this experience of the *basic* or *original* anxiety. What we usually do is to lean and to rely on something else than this empty centre of ourselves. The Buddhist contention is that we will never be at ease before we have overcome this basic anxiety, and that we can do that only by relying on nothing at all.
>
> —*Buddhism (Pg.* **745***)*

Back during the Catalog when the Whim-whams first showed up, Jack Downing administered neighborly first-aid. Later on Pierre Mornell shrank my head most fruitfully for several months—— from him I learned to pay attention to the context of symptoms rather than their content. In other words, watch wh I was doing rather than what I was thinking. It work

Mostly, of course, I was unfocussed. Most of my contemporaries—— late twenties, early thirties—— were either blurred out or settling down to long-term work. We no longer had any remnant of a Generational Story to sustain us from without. A healthy uncertainty was afoot. I messed around with writing —— journalism for **Rolling Stone** *and an interview for* **Harper's** *(both now in* **Two Cybernetic Frontiers***—Pg.* **455***). It was talking with Gregory*

Bateson—— and his book **Steps to an Ecology of Mind**—— *that gave me a thread to string my beads on. That process continues still.*

Last summer I returned to Canada for a long lone fretful couple of months in which nothing happened. Not even Nothing. One afternoon I considered seriously for the first time resuming publication of The Whole Earth Catalog. A day or so later I wrote Tony Jones at **Harper's** *to see if their invitation for me to guest-edit the "Wraparound" section would be satisfied with a preliminary "Whole Earth Epilog." I wanted to get the reader-response cycle going again so that a full-scale Epilog could be done by the end of 1974. They said okay.*

It all happened very quickly. On return to San Francisco I was ready to go on the Sausalito ferry with a sign "Secretary Wanted—— Interview here", when Diana Shugart (now Diana Barich) indicated she was up for work. We sniffed around Sausalito for an office, were shown (by Diana Fairbanks and David Gately) a mouldering crab shack full of junk renting at $40/month, and moved in.

Diana

September and October were spent putting together a "New Games Tournament"—— a massive semi-successful public event you can read about in the Summer '74 **CoEvolution Quarterly**. *We hired Pam Cokeley, whom everyone had loved during the failing days of* **Clear Creek** *magazine, to correspond with every source listed in* **The Last Whole Earth Catalog** *and update the next edition accordingly. Then Diana Fairbanks' friend Andrew Fluegelman let on he was dropping his legal career. We glommed him to be Managing Editor, whatever that might mean (it turned out to mean a superb job of getting distribution for* **The CQ**—— *the obstacle that defeats most new periodicals). When research traffic threatened to overwhelm Diana, she and Pam hired Andrea Sharp, who is one of those work demons that makes everyone else's work possible.*

In January we slid into production on the **Harper's** *"Wraparound" with the return of Steamboat from Nebraska to do paste-up and drawings. "EDITOR BREAKS PROMISE," we began.*

Some explanation is owed. In May 1971 we ceased making **Whole Earth Catalogs** forever sincerely enough on the expectation that someone would quickly come along and fill the niche better than we did. Well,

1) They didn't;
2) **The Last Whole Earth Catalog** continued to sell 5,000 copies a week with increasingly outdated information;
3) The North American economy began to lose its mind, putting more people in need of tools for independence and the economy as a whole in need of greater local resilience; and
4) After burning our bridges we reported before the Throne to announce, "We're here for our next terrific idea." The Throne said, "That Was It."

In retrospect **Harper's** *was not the best place for us. Their audience was unresponsive; their editor-in-chief didn't like our birth photographs or our presumption. Still, as Andrew said, it was a good shakedown cruise.*

The CoEvolution Quarterly *got its name late in the game. I had been wanting to call it "The Never Piss Against the Wind Newsletter", or perhaps "Making Circuit". I did have a formula in mind: we would print long technical pieces on whatever interested us—— the opposite of the predigested pap in, say,* **Intellectual Digest**. *So the Spring* **CQ** *had Paul Ehrlich on Co-evolution, Roy Rappaport and Howard Odum on energy and culture, Sam Keen on spiritual tyranny, and a nice reception from readers.*

March was showdown time on distribution for the EPILOG. Random House had done a good job on the **Whole Earth Catalog**, *with one $90,000 dispute about contract interpretation—— the difference got split. (One nice war story: when a shoddy "New Earth Catalog" was advertised by its publisher Putnam as the successor to The Whole Earth Catalog, Random's head-man Jim Silberman asked what should we do about it. I suggested that he tell Putnam that I might go berserk and remove all Putnam books from the next printing of the Catalog. A few weeks later Putnam ran an ad in* **Publisher's Weekly** *apologizing for the previous ad.) All very well, but I didn't want to be wedded to Random (definite non-marital trend here).*

Laura Besserman and Don Burns (from the original Catalog distribution with Book People) knew what was up and prevailed on their employer Penguin Books to make a solid offer. Accordingly we sat down with Don Burns and Don Passer in March to hear details. And the following day Random House was invited to reply. The negotiations and the eventual contract are reported in full in the Summer '74 **CQ**. *What it came down to was an offer of $1.75 per $4 EPILOG going to POINT from Penguin, and a $1.66 offer from Random. Random had fifty salesmen and lots of experience with bestsellers and with us. Penguin had eight salesmen. Finally I phoned Don Burns, "Random is a sure thing. Penguin isn't. We'll try Penguin."*

So far I'm not sorry.

We hurried into the Summer **CQ** *in order to clear decks for the EPILOG production. We had printed 5,000 copies of the 96-page Spring* **CQ** *and sold them all. The goddam Summer* **CQ** *filled 176 pages, sold out 10,000 copies immediately; Andrew had another 7,000 printed. While that production was in process I was hiring—— Al Perrin for art director, Susan Roth, Steve Leaper, and Katherine Borsody on paste-up. Evelyn Eldridge (she was Evelyn Goslow when she typed the Last Catalog) replaced Joe Bacon on composer. Triple-threat Andrew Main (camera, paste-up, and composer) invited himself aboard. Reddy North, looking just like Carol Channing, took on the index.*

Fully crewed, we went from **CQ** *production straight into the EPILOG—— 320 perfect pages in eight weeks or die trying. Our luck was in. An adjoining spacious storeroom came available for expanded workspace. No one tore down our condemned pier. The sieve roof never rained on us too seriously. No one got sick. J. Baldwin showed up with Kathleen to relieve me of the Soft Technology section. Diana took over Community. Doris took half of Learning. All the section editors came through with the goods on time. Everything I jobbed out—— Video, Black Interest, Electronic Music, China—— exceeded expectations. From here, it's smooth. God knows what it looks like from where you're sitting.*

"When men remember war they shall remember mud." When we remember this production we shall remember a parrot named Lolita who lived just outside the unclosable window shrieking incessantly, "Lo-LEE-ta! Lo-LEEEE-ta! Hello! Hello! Hello-hello-hello-hello-HELLO-HELLO! AAAAAKKK! Polly wanna CRACKER?"

A year of continuous production. I'm going to lay off for a couple months. The Fall **CQ**'s *in good hands with the Black Panthers. Everyone here is taking off but a skeleton crew until Winter, the Winter* **Quarterly**, *and whatever response the EPILOG stirs up. And events. I see they're hoping that President Ford's administration will be a time of "Peace and Quiet." I'm afraid that events, not necessarily Ford, will make those words ring as hollow as "Law 'n Order" did under what's-his-name.*

Lolita

In our researches on the likely economic apocalypse it's become clear what is the prime survival tool for hard times: friends. Good friends. Lots of them.

We ended the Catalog with Kenneth Patchen's coda, "Pause. And begin again."

Said the racooon, "Paws, and begin again."

(There's poor old Hamlet, see, clutching his poisoned wound. "The rest is silence," he says, and quivers his last. Horatio and Fortinbras weep; the curtain closes; the audience applauds. "Hamlet" gets up, takes his bows, and goes out for a late dinner. Same thing tomorrow night. I guess that's what else the rest is besides silence.)

--SB 12 Aug 74

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Index

INDEX CODE

Type face tells you what the reference is to:

PAGE HEADINGS	Items	Letters and small items
SUBJECTS	ARTICLES	References to titles

Pages 1-448 *are contained in* The Last Whole Earth Catalog.

This is a cumulative index covering The Last Whole Earth Catalog *and* The Whole Earth Epilog.

ALL PAGE NUMBERS UNDER 448 ARE IN THE CATALOG, ABOVE 448, IN THE EPILOG.

You may seldom need this Index. The logical organization of material in the Catalog *and* Epilog *make each book largely self-indexing. This combined Index draws the information in the two volumes together, and pinpoints titles and subjects to further assist you in finding the tools useful for perfect health, happiness, love, and full self-expression.*

Here is an explanation of the typographic code:

PAGE HEADINGS — *All items on the page relate to this term.*

SUBJECTS — *All pages cited contain at least one relevant item. Sometimes the subject is deep in the annotation or is in material quoted. Often several items on the page are relevant. Best to scan the whole page.*

ARTICLES — *An author has prepared a summary of the topic, with a selection of the best tools.*

Items — *Every featured tool, e.g., a book, periodical, organization, product or technique, is indexed under the caption as it appears on the page. Many items are indexed also by inverting the title or caption to bring out a significant word.*

Letters and Small Items — *Tools and miscellaneous suggestions submitted by the Whole Earth Reader community are represented by phrases from the captions.*

References to Titles — *When titles of books, periodicals or services are sprinkled in the body of an article or annotation, they are indexed in this typeface.*

—Reddy Dively

A

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Paul Krassner is Editor and Zen Bastard of The Realist *($3 a year) and author of* How a Satirical Editor Became a Yippie Conspirator in Ten Easy Years *($7)— both available from* The Realist, *Main PO Box 4027, San Francisco, Calif. 94101.*

TONGUE FU MEETS GOD

With Chocolate at my mother's, says a note on Captain Mediafreak's mattress. *Have a good trip.*

Unscrewing the Oriental head of the jack-in-the-box in his *I Ching*, Tongue Fu removes the Patoonga peyote button he snatched from the hand of Say When Daddy.

He lets it dissolve in his mouth while he sits prayerfully still. Then he puts an album, *Monterey Hit List*, on the stereo and listens to Otis Redding do *I've Been Lovin' You Too Long*; Janis Joplin do *Bobby McGee*; Jimi Hendrix do *The Star-Spangled Banner*.

Tongue Fu sings along with the national anthem— but lyrics from the previous song— "Freedom's just another worrrd... fo-or nothin' left to lose.... "

He turns on the television, channel selector in hand.

Click!

A ventriloquist is performing without a dummy by talking out of sync.

Click!

"Rediscover old values with the Waltons," an announcer is saying, "brought to you by the makers of Wonder Bread and Hamburger Helper. Tonight, John-boy thinks he may be a clairvoyant when he has a dream about a nuclear power plant being constructed on the farm— "

Click!

"We've finally established contact with the team of astronauts further on their way out of orbit," a newscaster is saying as he taps his foot in rhythm with his speech. "Can you hear me up there? How does it feel knowing you'll never set foot on earth again?"

Click!

"One nation under Me," a drag queen wearing bright green lipstick and rouge with matching fright wig is saying, "with barbituates and amphetamines for all."

She sits at a dressing table playing Monopoly with her mirror image, from which she now turns away.

"Oh, there you are, Tongue Fu, I've been waiting for you."

"Who are you?"

"I'm God, you silly asshole." She has the voice of Don Rickles.

"Have we not met before? You look— familiar."

"Yeah, and I breed contempt. Listen, you dumb freak, you've gotta stop feeling so goddam sorry for yourself. I mean it was okay for you to get stoned and watch the news and be really high when the body count came on with thousands of war dead— oh, where the devil is my Alice Cooper album?— but now you're so selfish to make such a big deal out of one single person you happened to meet. And you've never even looked at that last film of her, that's how much you care."

"It would be too painful."

"Look, dummy, you wanna experience Heaven or Hell while you're still alive, correct-o? Well, the cocksuckin' truth transcends 'em both. I mean I'll tell you something that'll blow your mind. There's an interview coming up that Cronkite will do with William O. Douglas, the Supreme Court Justice, y'know, and he's gonna tell how Franklin D. Roosevelt wanted him for Vice-President, with good ol' Harry Truman as second choice, only some political hack in Missouri reversed the names on the list 'cause Harry was a local boy, and Douglas is gonna say that if he had become President when Roosevelt died, he wouldn't've dropped the atomic bombs on Japan. How's that grab ya?

"But if you are God, why would you permit such a thing to happen?"

"That's easy, sonny. Because I'm a fuckin' racist.... "

Flashiebackie:

"I'm not a racist," a man on *TV Ching* is saying. He is Doctor Shocktreat, winner of the Ignobel Prize with four other scientists for inventing the disposable contact lens. If he were to put on bright green lipstick and rouge with matching fright wig, he could play God perfectly.

"I merely contend as a genetic premise," he continues, "that non-Aryans are born with less consciousness than Aryans. Oh, yes, I know how controversial it is to insist that consciousness is hereditary, but unless we're willing to lose the human race, compulsory sterilization is the final solution to the consciousness problem.

"With so many gurus here at Camp Crap who are of other than Aryan background, I can only say that despite their outward manifestations of higher consciousness, they have consistently achieved lower scores on the CQ Tests we've devised.... "

Tongue Fu has shut off the television and set up the motion picture projector.

Rosebud Zwalyimeh and Tongue Fu are kissing and undressing each other on Coincidence Cliff.

"I will respect your wish," he promises, "and never say— I love you— but I will always be thinking it."

Now he is performing cunnilingus upon her.

Tiptoeing up from behind him is Serpento.

Rosebud sees Serpento and her body twitches.

"You sexist pig," she says.

Serpento hits Tongue Fu on top of his head with a rock.

Then he does the same to Rosebud.

He pulls Tongue Fu's tongue out of Rosebud's body, drags them one at a time to the edge of the cliff and pushes them off.

Then, not wishing to waste his erection, he masturbates hurriedly.

Primo Columbian and Notary Sojak arrive.

Sojak says to Serpento, "Gimme an ear."

Serpento takes an ear from his pocket and gives it to Sojak, who puts it together with a handwritten note into the pocket of Rosebud's jeans.

Sojak hands Serpento a thick envelope.

"It's not easy pretending to be an honest cop," Serpento complains. "I gotta take a lot of shit from my brother officers."

"Y'know," muses Columbian, "that doesn't square with what Baba Blabla said about how we are what we pretend to be."

"C'mon, let's get outa here," Sojak says. "Geez, that Joan Baez sure sings pretty."

The three leave. Then there is nothing on the screen for a while except Coincidence Cliff itself.

The film runs out just as Tongue Fu reaches the top of the cliff with Rosebud under his arm....

Tongue Fu shuts the projector off and puts the television back on. The channel he was talking to God on is blank.

Click!

Tongue Fu is walking with his tongue in Rosebud Zwalyimeh's ear at Camp Crap. Suddenly he whips his tongue out of her ear and straight ahead; there is a blurred panning of the landscape.

"That camera-shy young man," the newscaster is saying, "is Tongue Fu, who is no longer camera-shy. For the past several months he has been making a feature-length film about his life and tongue. The son of a Japanese Kamikaze pilot, rumor has it that Tongue Fu plans to commit suicide at the end of the film as a publicity stunt— "

Click!

Tongue Fu is walking along 42nd Street, carrying Captain Mediafreak in his basket with one hand, and holding Chocolate Graham's hand with the other.

They pass a drag queen wearing bright green lipstick and rouge with matching fright wig, standing in the doorway of an Adult Bookstore.

Tongue Fu stares at her for a moment, then says: "Thank you, God."

The drag queen stares back at him for a moment, then replies: "God never says you're welcome."

Chocolate Graham slips one of her calling cards into the drag queen's bright green tote bag.

Then the trio continues walking, into the smoggy sunset.

Click!

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dogs is barking outside, them hippies is next door strumming guitars and sangingand I just took the last sip of my Jack-In-The Box Coke and sure wish I had me another one and Steward asked me to work thursday night and friday night and over the weekend and with my money I'm going to buy me a new wig and some spectator pumps!

—Joe Bacon

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moving right along with hypnosis and therapy. You know I was hypnotized once. Yep. They wanted to stop my teeth from bucking so much. and it sure worked good. You should a seen them before. Paralell to the sidewalk.

–Joe Bacon

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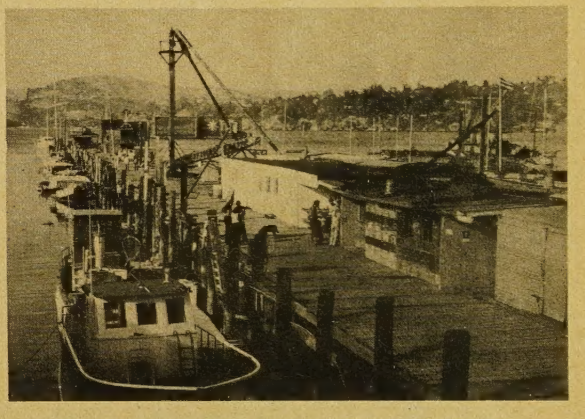

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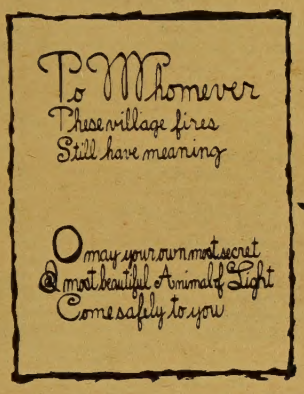

*–Kenneth Patchen**

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**From* Wanderings *(Picture-Poems, Handwriting-Poems, Drawing-Poems) Kenneth Patchen, 1971, $1.75, New Directions, 333 Sixth Ave., New York, NY 10014).*

INSIDE BACK COVER

While the Earth is always exactly one-half night, darkness is rare in space. Most of this series is from 22,000 miles above the Amazon River, central South America–– a "synchronous" satellite which orbits at the same rate as the rotation of the equator and so stays effectively stationary over one spot of the turning Earth. An excellent perspective for viewing the weather-motions of a whole day (in this case 19 Nov 1967) and a whole hemisphere. The "dawn" and "sunset" shots I added from an Apollo 12 Earth photo, guessing at what times they would have occurred. The other times given are accurate.

BACK COVER

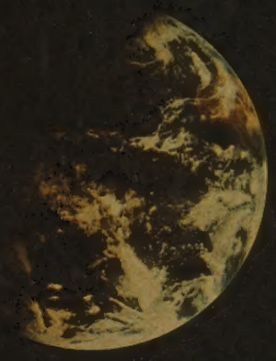
Dawn and dawn. Surface photo by Ted Streshinsky somewhere north of San Francisco Bay.

–SB

1:22 am

3:53 am

5:52 am



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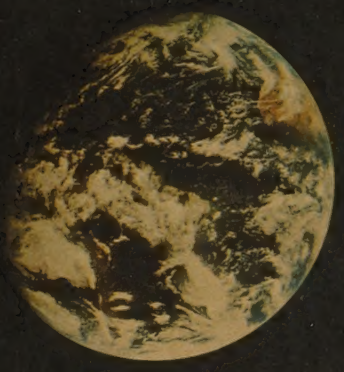

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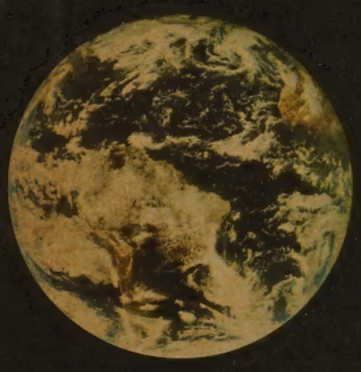

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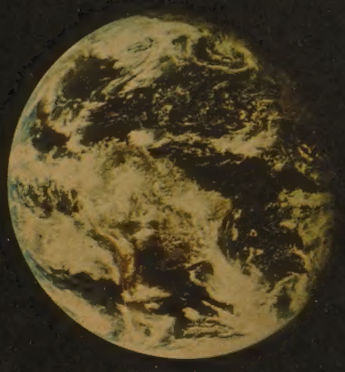

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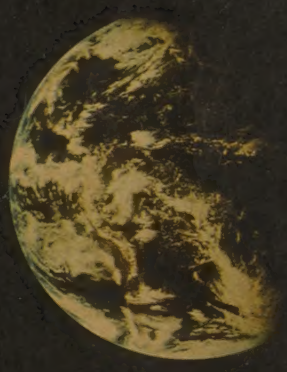

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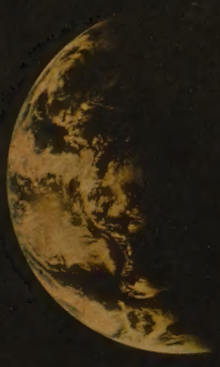

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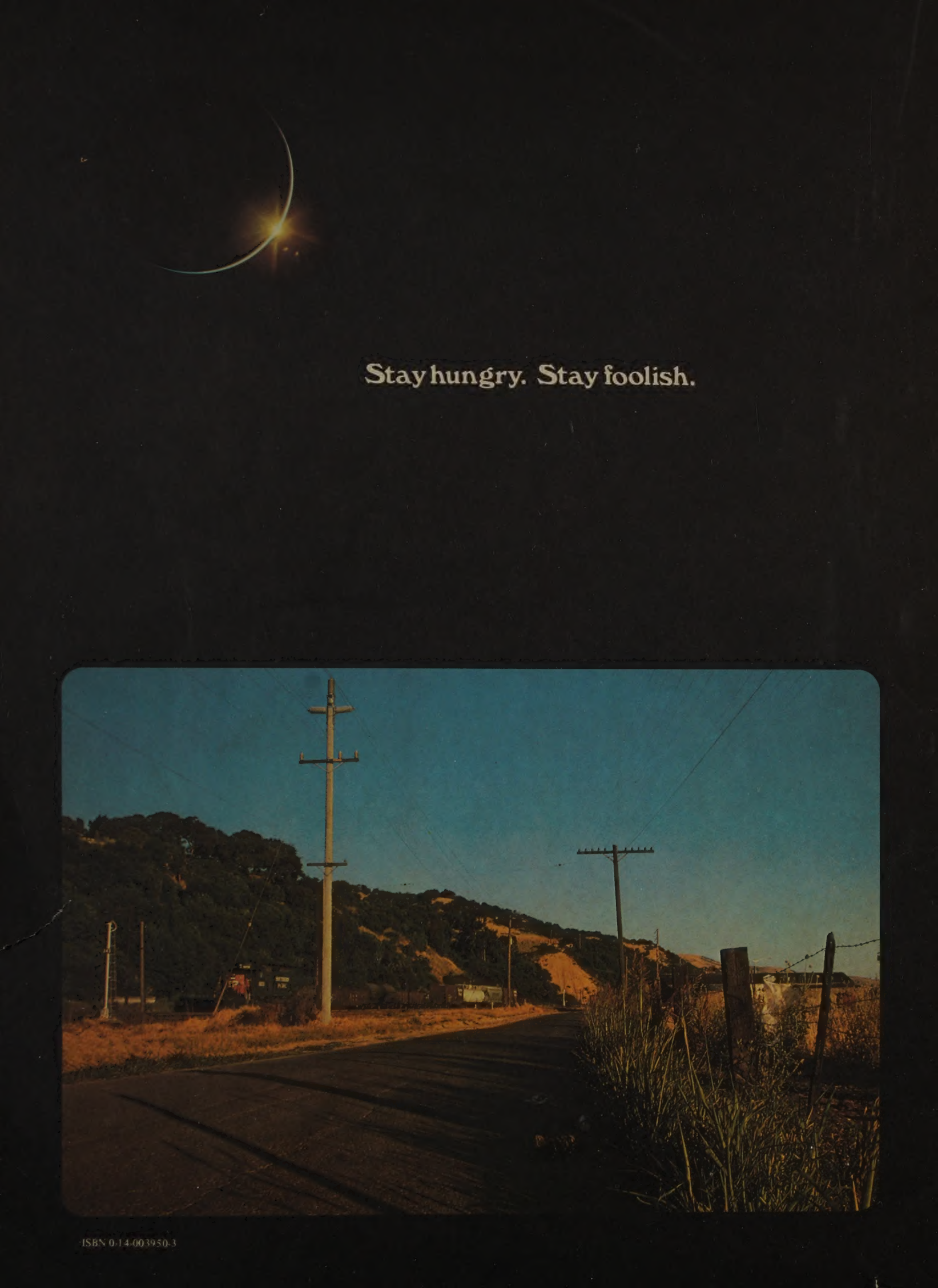

ISBN 0-14-003950-3